INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

SOUTHERN
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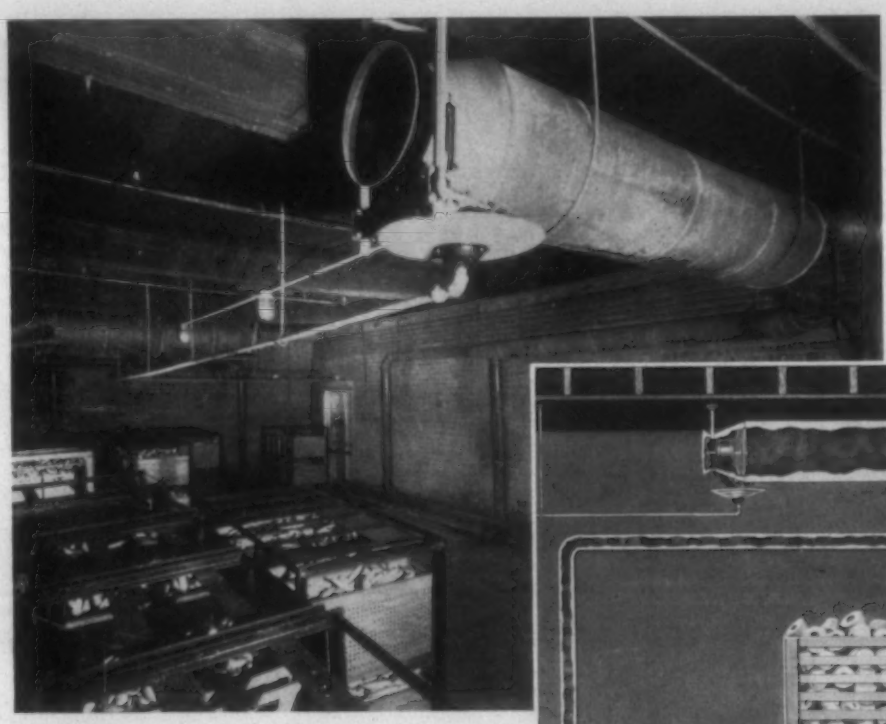
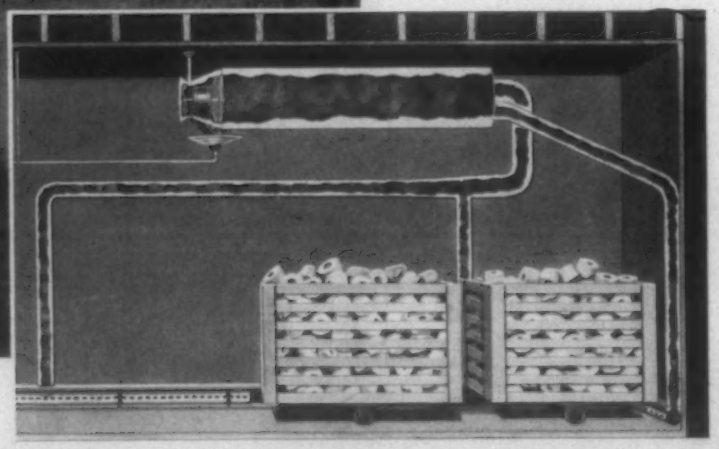
VOL. 41 CHARLOTTE, N. C., OCTOBER 1, 1931 No. 5



At Left: Bahnson Conditioning Room in use at a large southern mill.

Below: Sectional view of mixing chamber and ducts carrying the humidified air to the floor trunk to be discharged through and around the trucks of yarn placed in a Bahnson Conditioning Room.



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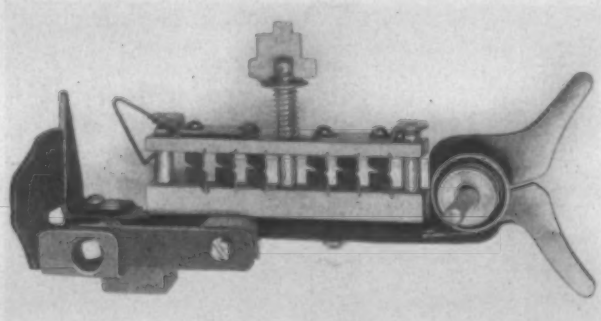

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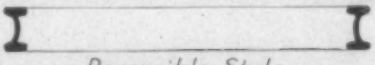

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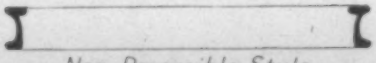

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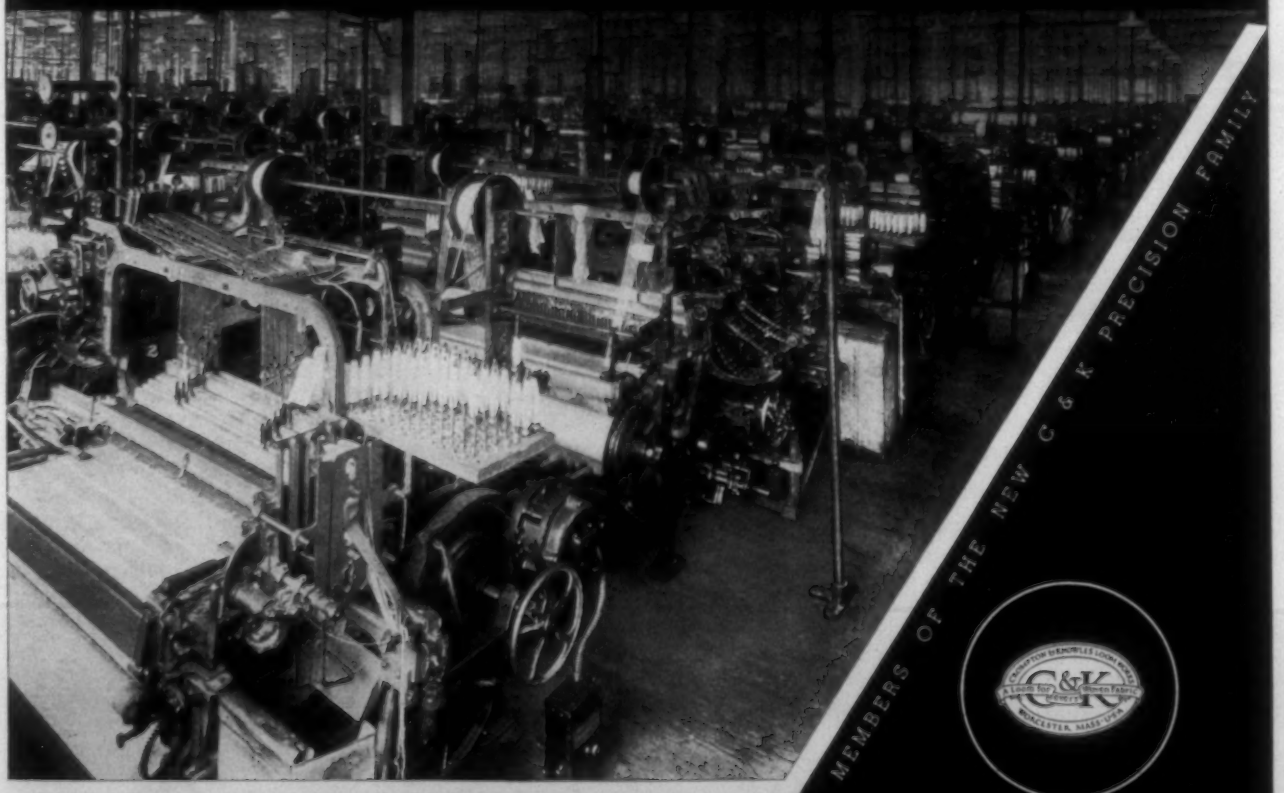

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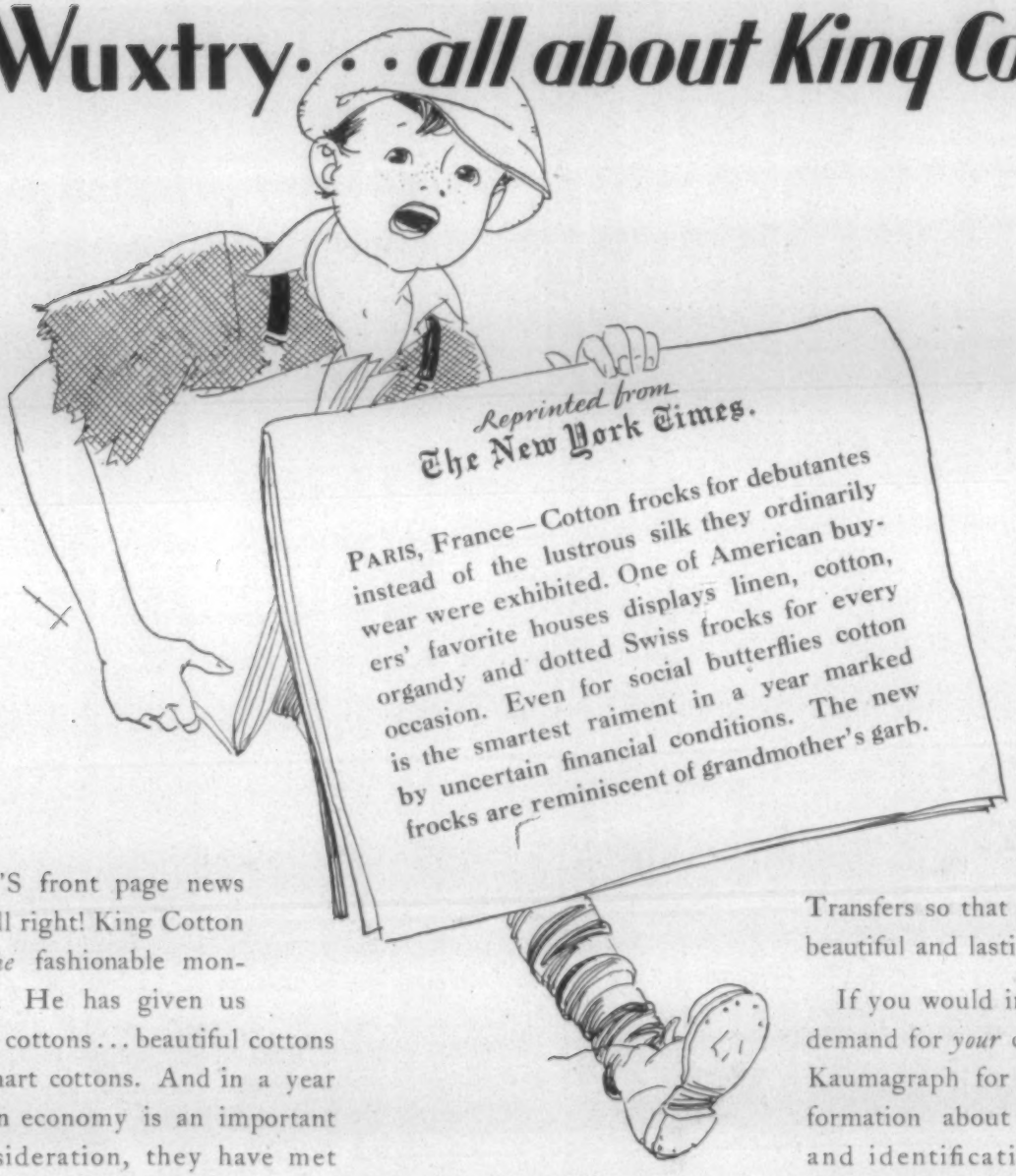

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Georgia Meeting Discusses Slashing, Weaving and Mechanical Questions

THE fall meeting of the Textile Operating Executives of Georgia, held at the Georgia School of Technology in Atlanta last Friday, was devoted to a technical discussion of questions pertaining to slashing and warp preparation, weaving and mechanical subjects.

At a meeting of the executive committee E. H. Rogers was elected general chairman, Albert Lehman vice-chairman and R. W. Philip was re-elected secretary. R. D. Harvey was elected to the Board.

The technical discussion began with the questionnaire on slashing and warp preparation, the discussion being as follows:

DISCUSSION OF SLASHING AND WARP PREPARATION

(Led by George S. Elliott, New Holland, Ga.)

Mr. Elliott: The first question is:

"Is it better to have quick drying process with high temperature on cylinder at high speed, or low temperature on cylinder at low speed? Give your experience as to best temperature and yards per minute. Have you tried higher or lower speed, and what results? Give yarn numbers and ends in warps."

LIKES LOW SPEED AND TEMPERATURE

Mr. Murphy (Columbus, Ga.): From our experience we have found it best to run at low temperature at low speed, 200 to 230 on the small cylinder, and 210 to 240 on the large cylinder. We find at low speed we get the best results, and less trouble from end breakage. Our yarn numbers are 21s, 25s, and 30s, and the average number of ends is 2250. The yards per minute are 27.

Chairman: Have you tried higher or lower speeds, and what effect did you get from it?

Mr. Murphy: We didn't get as good warps out of it on high speed.

Chairman: How about lower speeds?

Mr. Murphy: We get better warps.

Mr. Powell (Gainsville, Ga.): We are running 60 yards per minute. I don't know exactly the temperature of the cylinders, but our numbers are 22s, 32s and 40s. Average ends about 1200.

Chairman: Do you vary your speed one way or the other?

Mr. Powell: No; it is pretty constant. That is about as high as we can get it.

E. A. Rogers (Atlanta): I would like to ask how about the pressure? Can these gentlemen answer about that?

Mr. Murphy: Oh, anywhere from 8 to 12. It depends on the number of ends.

Mr. Powell: 10 pounds.

Mr. Clayton (Greensboro): We have not had a chance either to run low speed or low temperature on account of having to run at high speed in order to keep up, but we are running about 52 yards a minute. We have not temperature control, but we have between 8 and 9 pounds pressure. Yarn number 24s; number of ends 1730.

Mr. Thompson (Manchester): We run yarns from 4½ to 30s. We don't ever change our temperature at all. Our temperature runs from 240 to 250 on the big cylinder, on the small cylinder about 230 and 240.

Chairman: What is the maximum and minimum speed?

Mr. Thompson: On 3½s we run 1900 ends to the set. We run about 20 yards a minute. We have larger sets up to 5,000 ends on 14s yarn, that we run at about 21 yards a minute. We don't ever change the temperature at all. We change the speed of the cylinders at times to get it dry. We have controls on everything. The steam pressure varies from 1 pound up to 15 sometimes.

Question: You have controls on both cylinders?

Mr. Thompson: Both cylinders and everything.

Mr. Senn: It has been several years since I tried out high speed. I got in such a mess that I went back to low speed. We use about 1 pounds pressure on 3600 ends, 24s yarn.

Several years ago I put in temperature control, and we tried it out at 40 yards per minute, with about 6½ per cent moisture, and I took off some warp on the looms and ran a test. Then later I just simply forgot about having temperature control on the cylinders. I went back to my old way of running the slashers. I found it was easier and I got equally as good results. I have not discarded the controls altogether, but they are just there, and that is all. As long as they were there, I just left them there.

Chairman: What temperature did you run on the cylinders?

Mr. Senn: We were running at that time about 240 on the large cylinder and a little less than that on the small cylinder. We keep temperature controls on there, but so far as the speed of the slasher is concerned, we try to use our own judgment.

Another mess I got into was where we were running ply yarn with selvage. I made more selvage. As to the weaving, I didn't see that it improved it a particle. That has been several years ago.

Chairman: How do you account for that giving you more trouble?

Mr. Senn: I cannot account for it. The only thing I can say, we thought we might be entirely mistaken. I thought, when I put that on there, that maybe we would run possibly better but even as it was we were running and getting along pretty well, and I didn't know that it would improve matters. By actual test, taking 50 old warps, and putting on 50 new ones, and comparing the two against another set, two tests at various times, the old warps ran better with less end breakage.

Chairman: Did you run your old warps slower than you did with the controls?

Mr. Senn: Yes,

Chairman: Did you run those at a speed slower than you did with the new?

Mr. Senn: Yes.

Chairman: You more or less went by the feel of the yarn?

Mr. Senn: Yes. I had temperature control on the slasher. We have control on the cooking kettle and size box. I would not think of doing without it. So far as cylinders are concerned, I don't see anything to it.

Chairman: Did you test it for moisture regain left in the warps with the controls as compared without?

Mr. Senn: No. We did test it for moisture with control, but I did not test it without.

Chairman: What was your regain?

Mr. Senn: 6½ per cent with the control.

Question: Did you get rusty ends on high speed?

Mr. Senn: Yes.

Chairman: How many slashers did you have control on?

Mr. Senn: All of them.

F. K. Petrea (Columbus): We have quite a variety of fabrics, that possibly carry our various fabrics, that make, to a low amount of ends and then we have some running very high; possibly ranging from 700 ends to the set up to 4500 and 4700 ends to the set. We have found, in order to get the best results on these various fabrics, that we make, varying in the number of ends as they do, that it is according to the number of ends that we actually run as to whether or not we can get best results from high speed and high temperature, or low seeed and lower temperature on higher amount of ends. My experience has been, when we run up to 3500 ends, running high temperature and high speeds, when you come to the cylinders drying out at high temperature and high speed, and quickly the warp in striking the least rods in front of the slasher to be opened back again, it has a tendency to paste those ends together, more so than on low temperature and low speed. So really our experience as to temperature and speed is determined by the number of ends really we would have on the warp we were actually running. That is my experience that the best results would be according to the number of ends. Of course the number of yarn has something to do with that also.

Advantages of Controls

Chairman: I might add to what Mr. Petrea has said a little experience that we ran into. We feel a little differently about controls from what Mr. Senn feels. We feel they are quite advantageous in that the speeds and temperatures have their certain relation held together. We find with a warp with a given temperature running, say, standard 24 yards per minute, and run at 18 yards per minute, the control maintains the temperature properly at 196, and we get a 4½ per cent regain on it. Now we took that warp off, and looked at it under a microscope, and found it was brown where it had come in contact with the cylinder, scorched and rather brittle. We put it on a loom and ran it and compared it with three or four looms right near it, and it ran nearly double in stops per day. We find in experimenting with controls that the regain is much more uniform, and that for determining factors such as the moisture content you want, it is quite helpful to us towards maintaining that. Now as to high speed and low speed it largely depends on the work you weave. If you bake a yarn very quickly, it seems to form a hard gelatine surface on the outside or scaly surface, and it seems to be more brittle than if it has a little slower process of drying, and we feel that the slower you can run it the better. Of course each man works those things out to suit himself, and these things are merely brought out to give you something further to think about and look into.

Chairman: The second question is:

Size Percentages

"What percentage of your total size formula is starch; what percentage is softeners, gums, etc.; and what percentage is solids? Give construction and yarn numbers, and state what kind of starch is used. (b) *What have you found is the best percentage of size to apply, for weaving purposes only?"*

This thing is a little bit kind of under cover, and there may be those of you who had rather not answer it. It is optional with you, but if you care to do so, I would like to tabulate the answers, and see what can be found. Here first we have the per cent of starch. Then the per cent of softeners; and then the per cent of gums. Most of the size people, most of the starch people, can give information that is valuable. They keep up pretty closely with it, but there are some little tricks in the trade, and there are some things that are helpful in one plant, but not so many things, that really you might say the other person does not know. It may be as to what you are putting into your compound. It may be worth looking at now as to the quantities. If you don't mind, we would like for you to tell us what you are using. Mr. Senn, would you mind giving us help on that question?

Mr. Senn: I have the result of a little experiment here. I have it 84.4 per cent water and 11.4 per cent starch.

Chairman: Can you give the number of pounds of starch, then softener, and then gum?

Mr. Senn: I made this calculation with the weight of the water also.

Chairman: What percentages do you have?

A Formula

Mr. Senn: 87.4 per cent water; 11.4 per cent starch; 1 per cent tallow; and two-tenths of one per cent gum; 212 gallons of finished size. I took the total weight of the size?

Chairman: Now could you for just a minute leave out the water entirely, and give me your solids again?

Mr. Senn: I put in 180 pounds of starch; 15 pounds of tallow; and 3 pounds of gum; 198 total. That was dry gum.

Chairman: I figure that 90.9 per cent starch, 7.6 per cent softener, 1.5 per cent gum; 212 gallons of finished size. I think that covers the question.

E. A. Rogers, Atlanta: That figure of 90.9 is misleading, or do you call that all ingredients based on 100 per cent?

Chairman: That's all the ingredients other than water. In other words, he took the starch, and the softener,

and the gum, and added together. That gave the total amount of solids, and you divide that total into each of the other ones.

Now we have ours 91.8 starch, 6.5 softener, and 1.7 gum; 234 gallons.

Mr. Thompson, Manchester: We have 11¼ per cent tallow and about 88 per cent starch; no gum. Finished size 150 gallons.

Mr. Rogers: I figure it generally on the basis of total weight. I think it will run about 92 per cent starch, and about 8 per cent softener, and no gum; 115 gallons.

Chairman: Now the second part of this question is, *"What have you found is the best percentage of size to apply for weaving purposes only?*

Mr. Senn: We put in about 10 per cent. We feel that is the best percentage for weaving purposes only.

Mr. Murphy, Columbus: Ours will run from about 8 to 12.

Mr. Thompson, Manchester: Ours will run from about 8 to 12.

Mr. Rogers, Atlanta: I think ours runs from 6 to 10.

Mr. Powell, Gainesville: Ours is about 3.

Mr. Klinck: Is that single or ply yarn?

Mr. Powell, Gainesville: Single yarn.

Chairman: Mr. Powell has got the advantage of my office. He wants to wash it out as soon as he gets it in.

Paul Seydel, Atlanta: That's a very light weave?

Chairman: Yes. You have got to adjust that to the weave. Is anybody putting in as high as 15 per cent? (No response.) It must be that all present then are under 15 per cent.

Cut Marks on Denim

Now Question No. 3 is like a lot of other questions; there is a whole lot to be said about it, but there is nothing much done about it to be of great benefit. The question is as follows:

"How can you make a good cut mark on denims or other colored warp yarn that a weaver can see? (b) *How can you prevent the dye used for the cut mark from sticking to the slasher cylinder?"*

Mr. Klinck: It sounds like a very good scheme on some lines of cloth, but it seems to be rather difficult ever to make something that will stick on the yarn without sticking on everything else, or to get a chemical that will discharge the color. Most of them will discharge the color, but you get them on the hot slasher and it will evaporate out. I have experimented for a number of years, and have no satisfactory results at all. I was hoping that I could get Mr. Petrea or some of them to talk, and find out what they know.

Uses Red Dye

Chairman: That's what the question is for, to find out, if we can.

Mr. Cobb has an answer here. This answer is from C. K. Cobb of Canton. He states: We use red dye in making our cut mark solution. This is bought in powdered form. There is danger of using too much dye in solution. We find it best to use one teaspoonful of dye to a gallon of hot water, and stir until thoroughly dissolved. The weavers do not have any trouble in seeing the cut marks even on our darkest blue denims. Sometimes the cut mark dye will stick to the slasher cylinder, but this can be remedied by adding hot water in using. When the solution begins to look thick and heavy, we add water before it begins sticking to the cylinder.

Mr. Klinck: We do the same thing. We use a red or yellow cut mark. There is no trouble about doing that, using a direct dye, but the weaver won't always see that.

Chairman: Most of us have had trouble. Even on white cloth they won't always see it. They get off and get to talking, and don't see it.

Mr. Rogers: What happens when they don't see it?

Chairman: It generally makes a short. That's the sad part of it.

Mr. Tiedersall, can you give us some information on this subject?

Mr. Tiedersall: I cannot give positive information. We are arranging now to watch our cut mark, selvage mark.

Mr. Senn: We have run a lot of colored work at Enterprise, and we have a lot of trouble with cut marks. Running off the spooler, when the weaver comes to that cut mark on that white selvage, when it comes up, if he will move it just a little, it will save a lot of trouble. I mentioned this matter to the slasher foreman, and we have been trying to conceive some idea as to how to make those cut marks so the weaver will always see them. That boy I referred to just moves the selvage.

Question: Is the selvage colored?

Mr. Senn: No; white.

Chairman: That would work all right, where there is white selvage. In the event the selvage is woven in with colored filling, it would not show up.

Mr. Petrea: We run colored work. I don't know as I can give Mr. Klinck any information further than what has been said. Upon working colored work for quite a while we have this experience, that in making the various fabrics we do make we have to have colored selvages on some of these different things, in order to distinguish the cloth. So we cannot use a white selvage. We have used from a yellow color on cut marks to deep red, and our experience is that every one of those colors will get by the weaver. There are certain colors of yarn that yellow will not show on, or orange, and there are certain colors, certain other patterns, that the red will not show up on. Those are the only three colors we have been able to use, and that is not in any way successful at all. We have found this, that in using it there is a medium there to be followed. If you make it too thin, it will not make the color, or paste it on there, and it will not be colored enough then for the weaver to see it at all. Then, if you make it too heavy, or make it heavy where it can be seen, then, when it strikes the cylinder on the slasher, a certain amount dries on the cylinder. Then, when we run light colored warp behind that, the wet side strikes that place, and fades it, or makes its impression on the light colors that come in behind it.

Chairman: I have often wondered why some of these people didn't get out an instrument that could be properly placed on the loom that could be set and recorded electrically an accurate counter of a certain number of yards. This is quite a problem, not only on colored goods, but on white goods, where you run a definite number of yards per roll, or have to sacrifice a piece of cloth.

A Member: Somebody is manufacturing one now that will.

Chairman: Mr. Rogers, you are not running colored work now?

Mr. Rogers: No, but we had about the same thing. We had a yellow of about the same character of dye. We preferred it on the loom. We ran red on some of it. It depends on the background color.

Chairman: You don't use the cut mark at all now?

Mr. Rogers: We are not using any now to amount to anything. Sometimes we put some on, but it does not amount to much. We have a die or stencil for cut mark, and I notice they have taken that off entirely in one of

the mills. We have changed our method of paying, and we have the cloth taken off weekly at a specified time.

Chairman: Does that cloth have to be put up into definite lengths?

Mr. Rogers: Yes, but not long lengths. We cut it up into certain lengths for bags.

Hot Size in Cut Mark Dye

F. E. Heymer: Some years ago we had a lot of dyed warps, and we were only using a blue cut mark throughout the mill entirely, and we experienced a good deal of trouble in regard to the weaver seeing the cut mark. I tried dissolving yellow, dissolving in hot water a couple of hours, and we found the trouble that Mr. Petrea spoke of. I used then a teacup full of good hot size in addition to that solution, and overcame that trouble. Whether that hot size had anything to do with it of course I do not definitely know, but I tried that and overcame the trouble. If that is of any good to you, I am glad to have given you the information.

Mr. Archer: As I understand Mr. Heymer, he added hot size to the cut mark solution?

Mr. Rogers: How do you keep it hot?

Mr. Heymer: Every time you put it into the measuring box, put a little hot water to it.

Mr. Rogers: I know, but it will cool off as the slasher runs.

Mr. Heymer: We keep it in hot water. Every time we feed the box that is warm.

Mr. Archer: If you use a soluble gum, it will hold that dye in solution. That would overcome the sticking. Use a soluble dextrine, for instance; that will give you volume.

Prof. H. S. Busby: How wide should a cut mark be for weaving?

Chairman: About one and a quarter inches. I should say anywhere from one to two inches. The length should vary from three to six inches.

Yarn Stretch on Slashers

"What will cause the stretch in yarn to be more on one slasher than another when the same number of yarn, same number of yards, and same number of ends are run, and where the slashers are (supposed to be) exactly alike?"

I put in the "supposed to be" myself. That was not in the question as listed on the questionnaire.

Mr. Zachry: We find a different stretch on every different style of goods that varies anywhere, if my guess is correct, from three-quarters of one per cent up to two and a half per cent, and every slasher varies a little. We cannot get the same stretch on the same style on two slashers apparently just alike.

Chairman: What are some of the points that would cause a slasher to vary in stretch? Have you ever found a slasher that would give you the same stretch or more stretch than a slasher right next to it, and find the trouble?

Mr. Zachry: No. We didn't centralize the trouble. We generally try to keep it within a limit of 2 per cent, and, if possible, we would like to get that down if we could.

Chairman: You call 2 per cent within a reasonable range?

Mr. Zachry: Yes. Some of it will run as high as 6 to 7 per cent.

Mr. Rogers: The average is about 2½?

Chairman: We would like to hear from Mr. Powell, of Chicopee.

Proper Friction Necessary

Mr. Powell: I think the right amount of friction on the warp beams will tend to overcome this trouble. There are a number of things that might enter into it. We run some very light sets. We have a great deal of stretch sometimes.

Chairman: Mr. Thompson, can't we hear from you on this subject?

Mr. Thompson: We have from 1 to 5 per cent stretch. The same slasher varies sometimes on different numbers of yarn.

A Member: We have some positive, and we don't have as much difference on them. We have found that sometimes we have a friction on there, that pulls a little different. If you get it too tight or something, it will cause the trouble. Sometimes the cylinders are not exactly level. Sometimes you run into a little trouble where the roller bearings on the cylinders are worn on one side.

Chairman: That point about the cylinders not being level is a good point. Did any of you ever have a slasher that had a roller beam gummed up?

Mr. Archer: Yes. We change the oil.

Mr. Thompson: Sometimes on the back of your slasher you creels will not be level. You will have some high and some low and that will cause it to vary. There are a lot of things that will cause yarn to stretch on the slashers.

Mr. Thompson: We have had more trouble on account of cylinders than anything else, bad rollers, not level, and pulling heavy. Then again, building up one roller in front too much.

Chairman: It might be well for all of us who have not done so, to test our slashers to see if there is much variation and, if there is, from what you have heard this morning you can go into it.

Slasher Damage

"What is the principal cause of so-called slasher damage that causes seconds, not counting black oil that may be on yarn before it gets to slasher? What is slasher damage? Cause? Remedy, if any?"

Mr. Murphy: One cause of slasher damage is the size box not being thoroughly cleaned.

Chairman: What do you do to prevent the dropping, so to speak, dripping or sweating?

Mr. Murphy: Mop it out. Have it done about twice a week.

Chairman: Mr. Rogers, can you help us out on this question?

Mr. Rogers: Hard size I believe was overcome pretty well by running the slashers through the noon time, not shutting them down at all and the dripping from the hoods we have not overcome, but we are designing a new hood, which is very much further away from the cylinders and permits a man getting in there and wiping them out and they are designed so that any dripping will be carried away from the slasher cylinder, rather than dripping on it. We are also putting a fan to the slasher. The new hood covers both cylinders and the size box, whereas we did have the hood divided, one for the size box and one for the cylinders.

Mr. Willingham: Our experience has been that most of the slasher damage is due to the slasher men's carelessness. We have overcome that by getting hold of the men. That is other than oil I should say.

We have stains from different things. Sometimes we have rust boiling up out of the size box. To avoid that we clean that out every night thoroughly. We stop for about 20 minutes, and wash it out thoroughly. That

eliminated our rust on that. Sometimes we have something in the compound present.

Chairman: Has anyone ever experienced any burnt starch, either caused by your own processing or someone else's processing, causing black spots to come up?

Mr. Rogers: I would like to know more about those black spots you were speaking of, Mr. Elliott.

BLACK SPOTS IN SIZE

Chairman: We found something coming into our size box, a kind of black specks. We took it up with the starch people several times, thinking that in preparing the starch it was burnt. They worked on it, worked on it, so they said, very carefully, but it still came. We found there were certain accumulations around the coils in our storage kettle, and at certain temperatures after 203 it forms around the pipes in the kettle, and that will flake off, and then it would be soft enough so as not to disintegrate or go into solution, but would follow through to the size box, and every now and then it would cause a spot as big as a quarter.

Mr. Rogers: We had that same thing on two slashers, and it was enough to break up the yarn. Thats the only time we have ever had it. We thought it was something in the compound. We went to the trouble to try out various things that we thought might have gotten into the starch or compound, bu we never could find out what it was.

Chairman: We found our coils were lying too close together, and we opened them up, and that knocked it right in the head.

Question: What color was that?

Chairman: Black, a kind of brownish black. You could pick any piece up and mash it in your hand and it would feel like a piece of gelatine. It didn't seem to have anything in it, but it was brown and looked like it had been burnt.

Mr. Thompson: We had the same trouble in the size box. When boiling it out it would boil out and get on the yarn.

STICKING JACKET ON SLASHER ROLL

Chairman: The next question is as follows:

"What is the best formula for sticking the jacket to the slasher roll? What material have you found best to use for the jacket?"

Mr. Senn: We use an ordinary piece of drill and stick it on with white lead.

Chairman: Is anyone using anything other than white lead and a piece of drill?

Mr. Rogers: We use white duck and white lead.

YARN STICKING ON SLASHER CYLINDERS

Chairman: The next question is as follows:

"What causes yarn to stick to slasher cylinders, and what are the remedies?"

We have one reply here in which the man says "I don't know." He goes on to say that a number of size compound manufacturers put ingredients into their goods that cause the yarn to stick to the cylinders. My experience has been with those goods that cause this sticking, that they are very objectionable. However, I have always been able to prevent this by using approximately one gill of linseed oil to a vat of kettle size. This will polish the cylinder as bright as a new dollar. I have not found any objection to using the linseed oil for that purpose on bleached goods.

That is substantially what he says. Now has anyone had experience with yarn sticking to the slasher cylinders?

Mr. Senn: I had that experience and I apply turpentine.

Mr. Zachry, Atlanta: We had it, and put more tallow in our mix.

Mr. Thompson: We add a little more tallow when we find it sticking.

Mr. Archer: Improper cooking of the starch will cause it.

Question: Mr. Elliott, do you mean sticking in spots or all over the cylinders?

Chairman: Generally, uniformly or universally.

A Member: If it is sticking in spots, it is probably due to the slasher man.

Chairman: We have found that it came quite often from improper cooking of the starch, forcing it through. Generally, though, if it is pretty universal, oftentimes it is due to lack of enough compound.

A Member: We had a good deal of trouble with the yarn sticking to the slasher cylinders. We found we had improper ventilation and some would drip back, and, where it would drip back it would stick to the cylinders.

"WILD YARNS"

Chairman: Let's take up Question No. 8, which is as follows:

"What do you do to overcome short strings or 'wild yarns' coming up on warps from automatic syooling? Do you have this on warps from old style spoolers? Do you have this on warps from cone winders?"

Lets take the automatic spoolers first. Those who represent mills with automatic spoolers raise your hands. (Five or six.) Do you have wild ends coming up, and have you found anything to eliminate them?

Answer: We found it was carelessness of the warper tender.

Mr. Rogers: We find some due to carelessness of warper tender, and we find some due to carelessness in not breaking off the end by the spooler tender.

Chairman: You mean on the automatic spooler?

Mr. Rogers: On the automatic spooler, yes. We found some due to the cleaner brush not taking care of the tension right back here, the cleaner brush not cleaning it out as thoroughly as it might be.

Chairman: You mean cleaning the tension out?

Mr. Rogers: Yes. It corresponds with the guide on the spooler. Then we still found that on the warp after we did all we could there.

Chairman: You found it helped where you located it as far as you could?

Mr. Rogers: Yes; we doubled our cleaning, but we still have a big percentage of our loom stoppage due to this cause.

Chairman: Did you have that present with the automatic spooler more than with the average hand spooler?

Mr. Rogers: I have not noticed it so much on the hand spooler. I am not prepared to say whether we had that much on the hand spooler or not.

A Member: We have not had any trouble at all on that line.

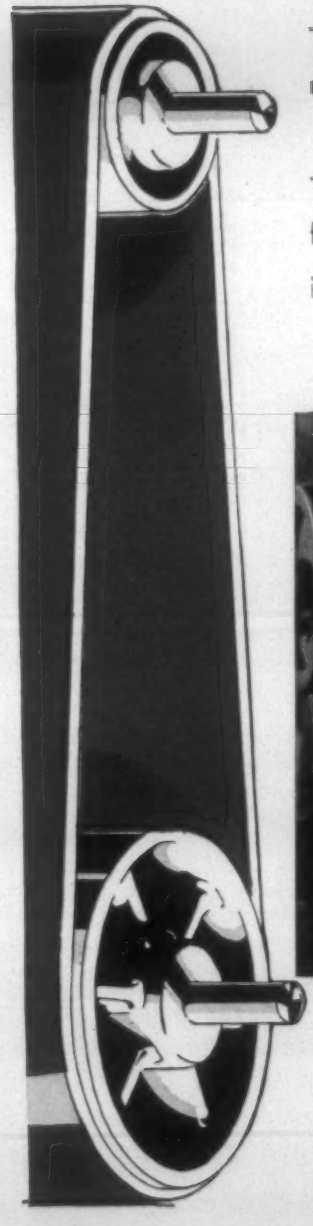
Chairman: Has anyone else having automatic spoolers been troubled with wild ends?

A Member: We have found 90 per cent of it due to carelessness.

Mr. Thompson: Wild ends coming up are due to carelessness. The carelessness of the section hand causes some of it, where he don't keep his brushes like he ought to, keeping them cleaned out. I don't think you would have any more on the automatic spoolers to the amount you put through than you would on the old spoolers.

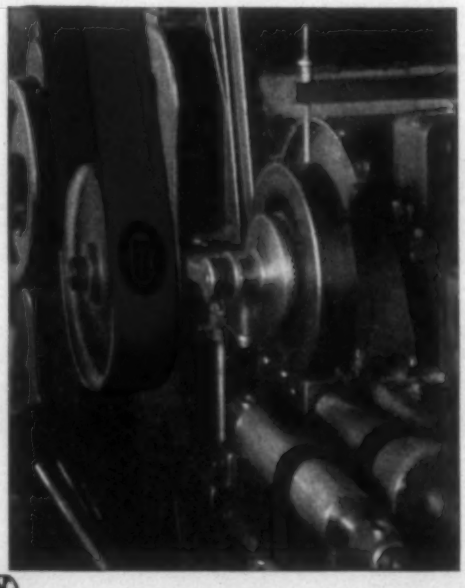
(*Continued on Page* 12)

"it takes a lot o' usin' to wear out a Condor product"



—in this frank expressive manner, a veteran mill man gave his opinion of Condor Textyl Products.

—flat belt, V-belt, hose of all kinds, asbestos friction material, asbestos and rubber packing, rubber lining, rubber covered rolls, and numerous mill sundries.



—every product of this group is the better for 38 years accumulated rubber manufacturing experience, and can be depended on to do "hard jobs" *well* and at low cost.

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—give Condor a workout in your mill.

ABOVE: Closeup view of a belt-driven Picker—from the group shown on the opposite page. Every Condor Product is stamped with the oval Condor trade mark. This practice is your guarantee of obtaining genuine Condor Textyl Products.

Condor Textyl Products are OVER 50% COTTON

The Manhattan Rubber Mfg. Division
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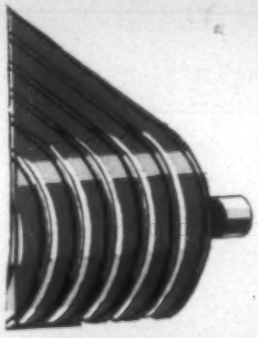

—each one correctly designed and constructed of strong cotton fabric imbedded in and protected by tough, live, fully-cured rubber—the muscle of industry.

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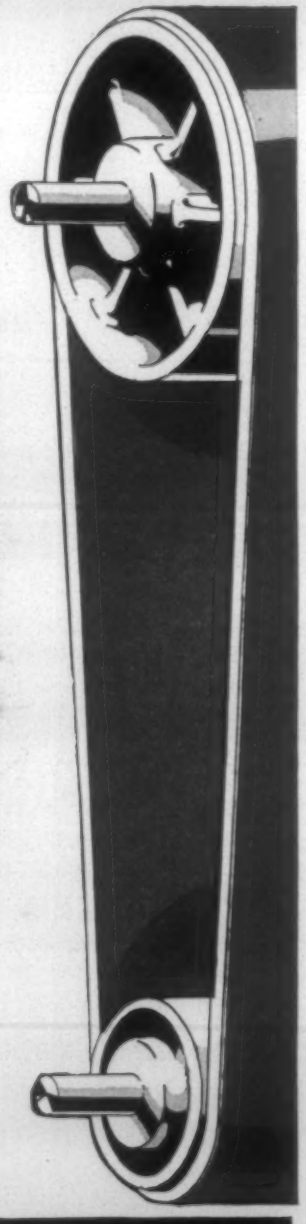

BELOW: A group of Condor Textyl Belts installed on pickers. Each machine is individually belt driven. See closeup view on opposite page.

Condor TEXTYL

V-Belt	Fire Hose
Flat Belt	Rubber Rolls
Air Hose	Mill Sundries
Cone Belt	Suction Hose
Acid Hose	Rubber Linings
Water Hose	Oilless Bearings
Steam Hose	Industrial Packings

The Manhattan Rubber Mfg. Division
of RAYBESTOS-MANHATTAN, Inc.
Executive Offices and Factories
Passaic, New Jersey

Georgia Meeting Discusses Slashing, Weaving and Mechanical Questions

(*Continued from Page 9*)

Mr. Rogers: After we have done all we have, we still get 10 per cent due to that.

Chairman: For the benefit of those not familiar with wild ends I will state that they are short pieces of twist two to four inches that have a tendency to wind around the threads, and they sometimes go through, and break the end out. Those of you present who have made tests as to the number of stops caused by that, raise your hands. It is quite a big thing. If you are running ten stops per day per loom, and cut out three of them by just one thing alone, it will amount to a whole lot.

Mr. Tiedersall: We were having little bunches to come out. We have had an 8-inch fan to blow them off. That fan was blowing so it gave it time to blow them off, those short pieces.

Chairman: Little wads around the thread?

Mr. Tiedersall: Yes. All the loose ends would blow out.

Brushes in Bad Shape

Chairman: Mr. Edwards writes a rather lengthy answer here. He says in substance that the most common cause of wild ends from automatic spoolers, and the most easily controlled, is the rotary brushes, that is, these brushes getting in bad shape. These brushes revolve, and take in loose threads and take them off, and, if the brushes are allowed to wear off or become badly tangled with threads, they fail to function. Most all of this can be traced to a faulty rotary brush. The blowers should be kept clean. We frequently clean our blowers, that is, dismantling and cleaning them. They can be taken off during nights and cleaned out. This will avoid carrying an extra blower in stock. If stock plates are properly set, I don't see how wild yarn can come from sloughing. Warper tenders should always be required to put even the shortest strings into their pockets. Much trouble can be avoided by proper supervision and training.

Chairman: Any who find a direct cause from old style spoolers, raise their hands. (Two or three raised their hands.) Those who have run tests on loom stoppages from wild ends, will raise their hands please. (None.) No one has any available figures as to the stops caused on looms by wild ends? They don't seem to have any.

Has anyone been able to put something behind the warper that will cut these wild ends after they come through? This also applies more or less to cone winding or whatever you are using other than the automatic spoolers.

Feel of Cloth Shows Variation

Our next question is:

"Why do two pieces of cloth have a different feel—one may feel like leather, the other have a soft feel—with both pieces made with exactly the same size formula?"

Mr. Senn: I have gone away sometimes, and changing the gear on the filling, and have found considerable difference. I got a new slasher hand and new spinner at about the same time, and I was between the devil and the deep blue sea, on account of these variations. I got in so hot behind the spinner that he began to investigate, and he found that the slasher hand was guessing at the compound. The way that was finally found out was that the second hand in the weave room took off two pieces of cloth, and noticed that one felt much lighter than the other. One felt like leather, and the other one was extremely light. So then we went back to the slasher, and the slasher man was guessing at everything, starch, tallow, water, and everything else. With exactly the same formula, and exactly the same construction, I don't see why it should not be the same cloth.

Chairman Petrea: Has some one here this morning had this experience that with warps made with exactly the same size formula, one feels leathery while another is flimsy? I suppose some one has certainly had that experience, or this question would not have been asked, and we want to try to answer that question.

Due to Loom Settings

G. S. Elliott, New Holland: We found an occasion one time when the slasher tender pulled his handle over on slow speed, and ran along 60 yards or more and the warp coming off of course had a different feel. There was a different effect. Also changing your whip roll and setting of harness will bring about a change of that kind.

Chairman Petrea: With the same set of warps this trouble can be caused by the setting of the loom. It can be caused by the slasher tender pulling the handle over and running that way for a while.

Mr. Tiedersall: Different loom settings will cause it.

Chairman: I have found the biggest noticeable difference myself would be when it came to finishing after it had been woven; not materially so much difference in the feel of that piece of cloth as it came from the loom as I would find when I would go to finish that piece of cloth. Take a piece of cloth from the same set of warps that had been woven on various looms in the weaving room, and take them to the finishing department to finish, one piece of cloth would take a different finish from another. Now whether that was due to the loom setting or slowing down of the slasher over a period of a certain amount of yardage going through, or what, I am unable to tell you. I was in hopes that something would be brought out at this meeting on that point, and I am just wondering if anyone had had that experience, where the same cloth didn't finish exactly alike.

Mr. Archer: I have made several tests, and I have seen a variation of as much as 2¼ per cent in the size. That would make a difference.

Whip Roll Tension

A Member: My experience is that the whip roll tension has something to do with it. Now if you notice, where you have got two pieces of cloth, and find a difference in the feel, an adjustment of the whip roll tension will have something to do with it.

Chairman: That goes back again to the setting of the looms.

Question: Which setting will give you the leathery feel and which the flimsy feel?

Answer: That depends a whole lot on the construction of the cloth you are making.

Chairman: In case you wanted the leathery feel, which would it be?

Answer: A whole lot depends on adjusting until you find what you want.

Question: Suppose you had the flimsy feel, and you wanted to change the setting of wour loom to give you the leathery feel. What would you do with the whip roll and these other elements to produce that change on any construction? Take any specific construction; what would you do to produce that change?

G. S. Elliott: It depends on the construction. The adjustment of the whip roll from my experience would depend entirely on the construction as to what effect was produced.

A Member: There is a setting for harsh goods. As you raise your whip roll, your harness eye is below the

center line, and that makes your ends distributed evenly, and give you a soft weave.

Chairman: Has some one else something as an answer to that?

Question: How far out from the floor do you have the reed?

Answer: There would be about 2½ inches from the edge of the cloth to your reed? Well, it would be a little better than that. The dagger point would be about one-half inch past the rod.

DEPTH OF WIRE ON REED

Chairman: The next question follows:

"Do you specify the depth of wire as well as the thickness when ordering reeds, and will varying depths cut shuttles or throw reed out of alignment?"

Mr. Murphy: We do not specify depth or thickness, either one.

Mr. Rogers: We are very careful to specify depth and thickness. We give all specifications, rib size, overall length, and thickness of the reed. Any variation in the thickness of the rib will give you trouble. The bottom of the reed is pressed against the race plate, whereas the top is controlled by the curve in the rail. A variation in thickness of your rib will throw it off one way or another.

Mr. Rogers: The reason we began to specify them was because, when this talk of additional air space came around, we wanted it, and we got some reeds without any specification at all for this purpose, and the reed was over one thirty-second, nearly one-sixteenth ,thicker than the reed we had been using, and, when we put that reed on there, it threw it all out of alignment.

Mr. Jones: We do not specify.

Chairman: I was just wondering how many men, having a standard in ordering those reeds, try to carry all those through on a standard basis of specification? How many have settled that all reeds come under that specification? (Several raised their hands.) There are several hands up on that.

Now has some one else a question about this? We have a division. Some say they do not, and some say they do.

A Member: The reed maker knows the depth you want. We usually standardize on the depth of reed and line our shuttle box for that reed. If we make any change, we specify the depth we make.

REED THICKNESS SHOULD BE UNIFORM

Mr. Rogers: The race plate determines the position of the bottom of the reed. Now if you vary the thickness of your reed, the center of that reed is determined—I mean the top position is determined—by your hand rail or reed cap. When you put a thicker reed in there, it will throw the top of it in front, whereas the bottom of it will remain stationary.

G. S. Elliott: It leaves it inclined. The bottom gets away from the center of the top.

Chairman: Your shuttle would have its weight against the top of the reed rather than against the full face of it?

Mr. Rogers: Yes. It will change the position at the top, and the bottom will remain as it is.

Chairman: You would have that same trouble, if the rib itself was a different size. Take one reed with a half-inch rib and another one one-sixteenth of an inch larger, would not that throw it out of alignment, too?

Mr. Rogers: Yes.

G. S. Elliott: The center of the rib, whether half inch or not, if the reed cap would go over it, it is still in the center, but if the wire is thicker down to the bottom, that comes up to the toe of the race plate, that would be pushed backward. Your reed cap does not change its center whatever. As long as your rib is sufficiently small for your reed cap to go over, you have more or less got that same center on your reed cap.

Chairman: That center would have to be thrown out from the bottom rather than the top?

G. S. Elliott: That is where this come in. In changing from one reed concern to another, which sometimes has to be done, this should put you on your guard, in getting straightened out with them.

Mr. Rogers: Whether you change or not, it is better to specify.

Mr. Zachry: Does anybody have a shuttle cut in changing from one warp to another?

G. S. Elliott: That may be brought about by the same condition. He changes his reed when he changes his warp.

Chairman: The next question is:

LIFE OF SHUTTLES

"What is the average life of a shuttle? Give loom width, speeds, etc."

Mr. Brooke, Greensboro, Ga.: That depends entirely upon the physical condition of the loom and a proper alignment. There are various things that happen that make a shuttle wear out. The type of wood that the shuttle is made of has something to do with its life. I should say with full time day operation, 60 hours, a good shuttle will last around 18 months. That is generally my experience in checking up on it. I think a shuttle ought to last that long.

Robert W. Philip, Atlanta: How wide a loom?

Mr. Brooke: Forty.

Robert W. Philip: Is that what you have found, or is that your opinion of the length of time a shuttle ought to last:

Mr. Brooke: That is my experience. I have had shuttles to run longer than that.

Mr. Thompson: The average life is about four months on 541 90-inch looms.

A Member: On 60-inch looms on goods of 135 picks two years; on 34s one and a half years.

Robert W. Philip: Has anybody got an average over 24 months?

A Member: My average is two years, 44s and 50.

A Member: The average is about 14 months.

Mr. Heymer: I believe most of you present here think the average life of a shuttle is not more than 12 months; taking everything into consideration, the abilities of the loom fixer, the breakdowns, and so on. That is my experience. I think you will all agree to that.

G. S. Elliott: I disagree with you.

Mr. Heymer: I had a shuttle a long time ago that came from Austria, impregnated with hardened fibre. That shuttle lasted me three and a half years. The war came on, and I couldn't get any more. That is an exception. We have the human element here, and any man that can get two years' service out of a shuttle, can pat himself on the back.

Mr. Zachry: We get about 36 months on 54-inch looms, 135 picks. On osnaburgs 10 to 12 months; but an average life on 1,400 looms is about 14 months. We don't think that is very good. We would like to have some one else tell us how to get it better.

The meeting then adjourned for lunch.

AFTERNOON SESSION

SETTING LOOMS TO PREVENT BOW IN WARP THREAD

Chairman: The next question is:

"What is the best way to set a loom to keep bow out

(*Continued on Page* 26)

Practical Textile Designing

BY THOMAS NELSON

Dean of The Textile School N. C. State College

This is one of a series of articles on designing by Dean Nelson, a recognized authority on the subject. The articles are extremely practical and will be found particularly helpful by the younger men who are just beginning to study designing. The next article will appear next week.—Editor.

COLOR EFFECTS—PLAIN WEAVE

A great many varieties of fancy color effects are produced by a different arrangement of colors. In order to understand these color effects it is necessary to keep in mind that when a certain color of thread is raised, that color will appear on the surface of the fabric, but when the thread is depressed, the color of the filling will appear on the surface of the fabric.

The simplest of these are the hairline and tricot effects. These are produced on the ordinary plain weave. The object in making color effects on design paper is to obtain a copy of what will appear in the fabric when woven.

PREPARATION OF DESIGN PAPER

In making a color effect, first decide on the weave to be used, and also the colors to be used. Mark off, on

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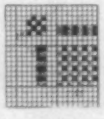

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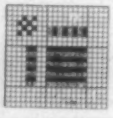

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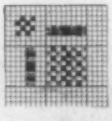

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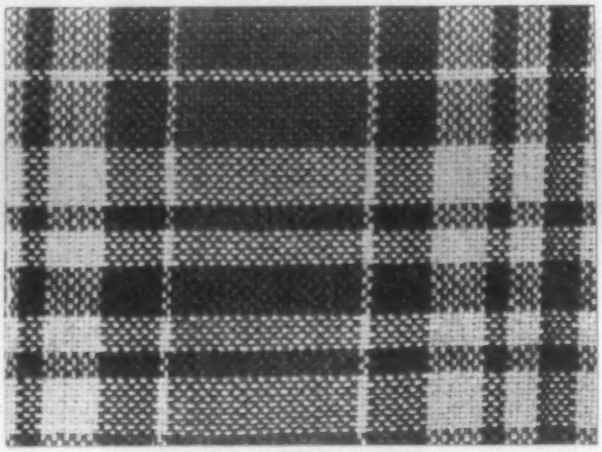
design paper, the required number of squares and in the upper left hand corner paint the weave to be used. On top of design paper indicate the colors of warp threads to be used. At the left hand side indicate the colors of filling to be used. In faint marks or dots, on the required number of squares indicate the weave then fill in each square so marked with the color of warp indicated on top. Then fill in the empty squares with the color of filling indicated on left hand side.

The following illustrations will explain the different steps necessary to produce color effects.

Fig. 190 illustrates the design paper laid out with weave to be used in the upper left hand corner. The colors of warp are indicated by different type on top of threads to be used, as is also the colors of filling at left hand side of threads to be used. The type shows the plain weave ready to be filled in with the colors of warp.

Fig. 191 illustrates the effect obtained by raising the warp threads according to colors at top of threads.

Fig. 192 illustrates the complete color effect. On each pick of filling every empty square is filled in by the color of filling indicated on the left hand side. Assuming the colors used to be red and black, alternating bars of these colors will appear across the fabric. By changing



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the color of filling and having the first pick black and the second red, a hairline effect is produced.

Fig. 193 illustrates this effect. Assuming the colors to be as in Fig. 192, alternating hairlines of these colors will appear lengthwise of the fabric.

When the plain weave is used and the threads are raised as in example given, on first pick the first thread raised and the second thread depressed, color under color gives bar or tricot effects, but color over color gives hairline effects. For example, in Fig. 192 the first pick red passes under the first thread which is red and over second thread which is black and this gives the tricot, but in Fig. 193 the first pick black passes under the first thread which is red, and over the second thread which is black and this gives the hairline effect.

If the colors in warp and filling are changed at different intervals almost any number of combinations of hairline and tricot effects can be made, the size of these depending on the number of threads and picks used.

Fig. 194 illustrates the design paper laid out for a combination of hairline and tricot effect showing the threads raised previous to inserting the filling. Threads arranged 1 red, 1 black 2 time; 1 black, 1 red 2 times. Filling arranged the same. Fig. 195 illustrates the complete effect.

Fig. 196 illustrates a gingham fabric made on the plain weave. It will be seen that when one color crosses its own color a solid effect is produced, for example, when green filling crosses green warp solid green blocks are formed in the fabric, and the same effect is produced with all the other colors. The arrangement of warp and filling threads is as follows: 36 green, 2 white, 10 red, 10 white, 4 black, 6 white, 8 black, 6 white, 4 black, 10 white, 10 red, 2 white.

COLOR EFFECT—TWILL WEAVE

The preparing of design paper for color effects on twill and other fancy weaves is exactly the same as for the plain weave. By using three colors with a three harness twill weave, hairlines and tricots can be made in these colors providing the colors are solid and that each color

(*Continued on Page* 18)

To tell you what you want to know **about rayon yarns and their more profitable use. This is No. 4 of the series. Reprints of preceding numbers sent free on request.**

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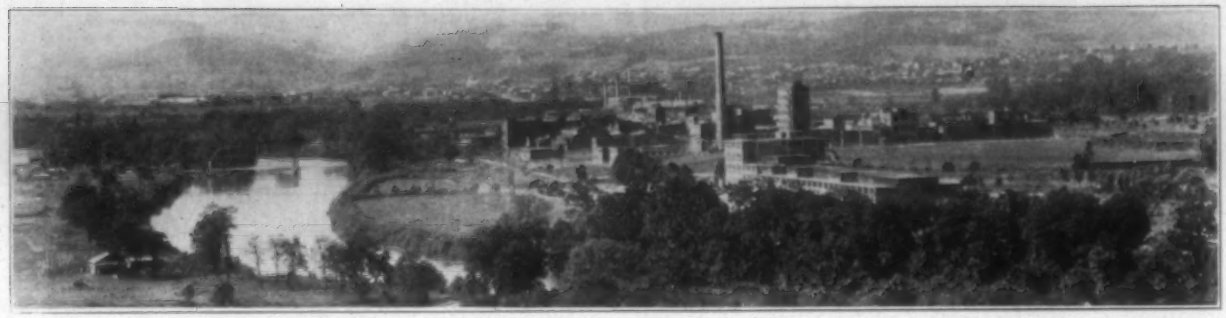
Tennessee Eastman to Produce Acetate Yarn



Part of Tennessee Eastman Corporation's plant at Kingsport. The yarn mill just completed, 102 feet by 580 feet in size, is in the foreground. The group of buildings at the right are the cellulose acetate plant. The wood distillation retorts are in the rear, with six black stacks, behind the charcoal and chemical refinery buildings.

The Eastman Kodak Company, oldest American manufacturer of cellulose acetate, will begin in October turning prt of its production of that material into acetate yarn. This step follows more than two years of experimental, semi-commercial yarn production and the completion this month of one of the largest acetate yarn spinning plants in the United States, at Kingsport, Tenn.

The Tennessee Eastman Corporation, a wholly-owned Kodak subsidiary, will operate the yarn mill. Tennessee Eastman already manufactures cellulose acetate at Kingsport, and also the acetic acid and acetic anhydride which are used in making cellulose acetate. Because these facilities already exist for producing raw materials, the corportion is in a favorable position to manufacture cellulose acetate yarn.

Raw Acetate Basis of Both Yarn and Film

Cellulose acetate used to make yarn at Kingsport will have characteristics similar to that going into the manufacture of photographic film. Film making is one of the most delicate chemical operations found in any industry and consequently requires the finest of materials and closely scrutinized production. The same intensive research and carefully controled production methods that established the Eastman Kodak Company as a manufacturer of photographic materials will be applied by the Tennessee Eastman Corporation in the effort to establish Eastman acetate yarn as a quality product.

Acetate yarn is to be not a side inssue with the Eastman Kodak Company but one of the concern's main products. During the past two years, the new yarn has been tested and approved by consumers in every phase of the weaving and knitting industries. Possession of a complete cellulose acetate plant of large capacity serving the Eastman Kodak Company's film requirements is counted important in assuring all users of Eastman acetate yarn a dependable source of suuply.

Eastman acetate yarn will be distributed by the A. M. Tenney Associates, 171 Madison Avenue, New York City. Mr. Tenney, who is the head of the firm bearing his name, and John C. Inge, sales manager, are both well known to the textile trade, having had many years of experience in supplying high grade synthetic yarns to the weaving and knitting industries.

Entry of Eastman into the acetate yarn field, after very thorough market study, is being accepted by the industry as a reflection of the company's belief in a demand for yarn with special characteristics commanding a price premium.

Eastman acetate yarn will be sold in a full range of commercial counts from 150 to 45 deniers. It will be offered in skeins, and on spools, cops, and cones, including tinted cones for the knitting trade.

The Eastman Kodak Company, having manufactured cellulose nitrate photographic film since 1889, began experiments on cellulose acetate in 1907. The first cellulose acetate film, marketed as a supplementary photographic material, was sold in 1909.

Amateur motion picture photography has expanded very rapidly since it was introduced in 1923. Eastman film has been increasingly in demand also for x-ray use. The larger consumption of cellulose acetate thus necessitated in film manufacture at Rochester was the reason for building the Tennessee Eastman Corporation's large cellulose acetate plant at Kingsport late in 1929, close to the sources of supply for cotton and adjacent to the source of supply for acetic acid and acetic anhydride in the corporation's own plant.

Before that, Tennessee Eastman's entire function was producing, by wood distillation, various chemicals for film manufacture, including acetic anhydride; but until last year cellulose acetate was manufactured at Rochester, on a smaller scale, instead of at Kingsport. Raw material for Tennessee Eastman's wood distillation is drawn from timber resources of about 120,000 acres, owned or controlled by the corporation. A large sawmill, 27-mile railroad, a water filtration plant with 2,500,000 gallons' daily capacity, a power house adequate for future requirements, and a plant site of 375 acres are included in the Eastman equipment at Kingsport.

Introduction of Eastman acetate yarn last year on an experimental basis followed more than three years of intensive specialized research by the Kodak research laboratories and by the Tennessee Eastman Corporation.

PERSONAL NEWS

George M. Wright, president of the Republic Mills, Great Falls, S. C., recently underwent a tonsil operation in a Charlotte hospital.

J. J. Ponders has resigned as general manager of spinning, winding and twisting at the Cherry Cotton Mills, Florence, Ala.

A. H. Goodman, of Clinton, S. C., is now in charge of spinning, winding and twisting at the Cherry Cotton Mills, Florence, Ala.

S. M. Sloan, formerly secretary and treasurer of the Waldensian Weavers, Valdese, N. C., has returned to his former position at the Alpine Cotton Mills, Morganton, N. C., where he is in charge of the office.

L. A. McAllister, formerly of the Dunean Mills, Greenville, S. C., is now night overseer of weaving at the Spencer Corporation, Spindale, N. C.

W. C. Henderson has been appointed Chattanooga representative of A. M. Tenney Associates, distributors of Tennessee Eastman acetate yarns. He has offices at 414 Provident building, Chattanooga. The North Carolina representative is Gordon R. Hope, Greensboro Bank & Trust Co. building, Greensboro, N. C., whose appointment was announced some weeks ago.

Philip N. Thorpe, who has been general sales manager of The Atwood Machine Company since 1929, has resigned that position, effective September 15th. He is now identified with, and can be reached at P. N. Thorpe & Co., electrical engineers, 267 Fifth avenue, New York, N. Y. Mr. Thorpe has been prominently identified with the textile industry for 35 years.

Charles H. Bauer for the past six years manager of the automotive division of the L. H. Gilmer Company of Philadelphia has enlarged his sphere of action to embrace the entire sales of the company's many industrial and automotive products.

Through intensive merchandising methods coupled with a natural ability for efifcient sales organization, Mr. Bauer in these six years has greatly broadened the company's automotive business and brought it to its present international standing. His contacts both in the industrial and automotive field have been and are so numerous that he has become internationally known as a merchandising authority. This is attested by the fact that at present Mr. Bauer is international president of the Automotive Boosters Clubs, which numbers some 1200 manufacturers' representatives, member of the Board of Counsellors of the Motor and Equipment Association, and likewise a contributor to many publications upon general subjects pertaining to effective sales and merchandising policies, both domestic and foreign.

Fred L. Smyre was elected to succeed S. A. Robinson as president of the Gaston County Textile Manufacturers Association at the annual meeting held at the Armington Hotel, Gastonia. D. P. Stowe, of Belmont, succeeds Mr. Smyre as first vice-president, C. D. Welch, of Cramerton, succeeds Mr. Stowe as second vice-president and directors were elected to serve three years consisting of Kay Dixon, S. P. Stowe, of Belmont; W. H. Suttenfield, of Statesville; John H. Rutledge, of China Grove; Carl A. Rudisill, of Cherryville, and Frank W. Van Ness, of Tuxedo, these serving with the one-year and two-year holdover members of the board.

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NON-FLUID OIL stays in bearings—and avoids costly oil stains on goods. It does not drip, leak or spatter like liquid.

Not only does NON-FLUID OIL do away with oil stains but it reduces the cost of both lubricant and labor—lasts 3 to 5 times as long as liquid oil.

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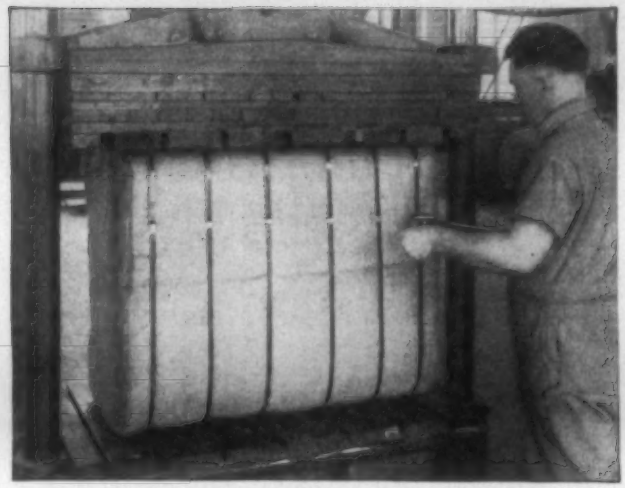

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-- the name of a better
Bale Tie System

Even the most critical executive cannot help admitting the logic of changing to Stanley Eversafe in view of advantages like these:

1. **Stanley DS Seals make much stronger joints than any other type of seals.**
2. **Round Safety Edges and Ends on Stanley Eversafe prevent cuts and scratches and speed up baling operations.**
3. **Stanley Eversafe Ties "Coiled Double" save just half the time in uncoiling and measuring.**
4. **The Satin Finish on Stanley Eversafe gives you smooth, clean ties to work with.**
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Many minor cuts, digs and scratches, generally unreported, slow up tying operations. Round Safety Edges and Ends on Stanley Eversafe Ties prevent such injuries and speed up operations.

Your Firm's Name, Trade Name, Trade Mark, Slogan, Warnings and Special Designs can be had printed continuously on Stanley Colorgraph Ties.

Stanley EVERSAFE Bale Ties and Seals

Practical Textile Designing

(*Continued from Page* 14)

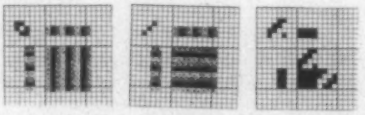
crosses its own color. The picks must also repeat on the same number both as to warp and color.

Fig. 197 illustrates a hairline effect obtained by using the $\frac{2}{1}$ twill weave. Any three colors can be used by having them arranged the same in both threads and picks.

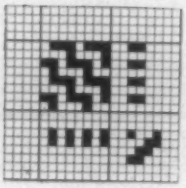
Fig. 198 illustrates a tricot effect obtained by using the $\frac{1}{2}$ twill weave.

Fig. 199 illustrates a shepherds plaid, obtained by using the $\frac{2}{2}$ twill weave. Colors arranged 4 dark, 4 light.

Fig. 200 illustrates a zigzag effect obtained by using the $\frac{2}{2}$ twill weave and having the threads arranged one and one, that is, one thread dark and one thread light with picks arranged the same. An unlimited number of



197 *198* *199*



200

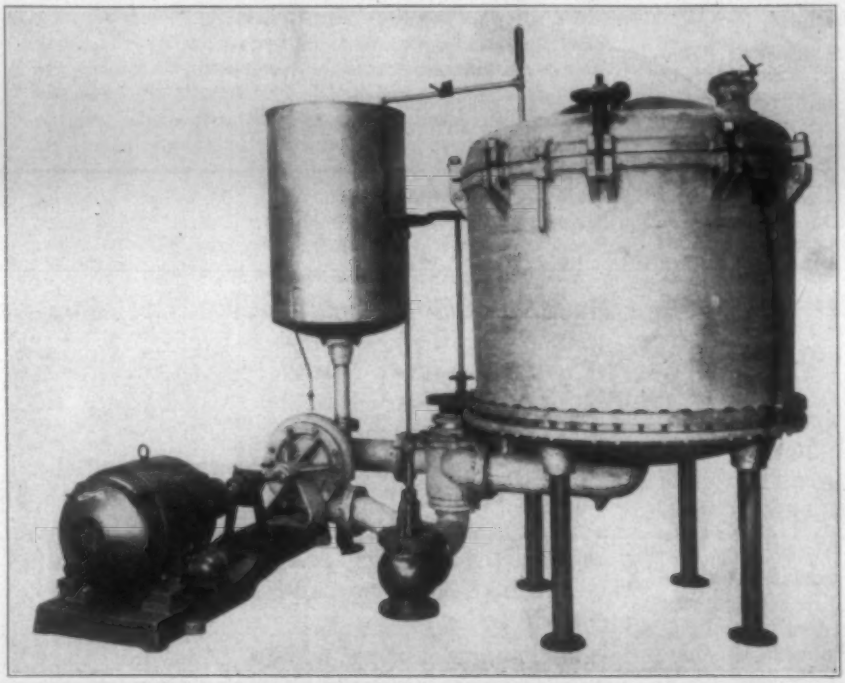
effects can be obtained by the different twill weaves, and by a slight change in the arrangement of colors.

Fig. 201 illustrates a plaid dress goods fabric made with the $\frac{2}{2}$ twill weave. The same effect is produced when color crosses color as in the plain fabric. The arrangement of colors in warp and filling is as follows: 18 white, 10 olive green, 18 white, 6 olive green, 6 maroon, 4 light blue, 6 maroon, 8 olive green, 32 maroon, 16 red, 4 light blue, 4 maroon, 4 dark blue.

Whitin Makes Study of Spinning and Twisting Rings

The Whitin Machine Works have just issued a very attractive and informative folder on their "Crys-steel" rings for spinning and twisting. The covers of the folder are printed in aluminum and blue inks, making it a very striking bit of direct by mail advertising. The text matter, which is fully illustrated, deals with the tests which the company made to determine the proper structure of rings from the standpoint of material used, method of forming ring blank, method and duration of carburization and heat treatment. The bulletin, which is the first in a series on "Crys-steel" rings, is well worth the attention of all mill men who are interested in spinning and twisting rings.

BUILT
BY PRACTICAL YARN DYERS



One reason for the exceptional performance of Franklin Process package dyeing machines is that they are built by practical yarn dyers. We know of no other builder of yarn dyeing machines who also dyes yarn for the trade, most certainly not on the same scale as the Franklin Process.

The custom dyeing department of Franklin Process includes five yarn dyeing plants with an annual production in some years of over 15,000,000 pounds. All of these plants are equipped with Franklin Process package dyeing machines. Any changes in design are thoroughly tested in one or more of these plants before they are offered to the trade. The Franklin Process equipment that customers buy has been proven by test.

In making a decision as to what type of package dyeing machinery to buy, be sure that your decision is based on facts and not on extravagant claims which cannot be substantiated.

The enormous production of the Franklin Process custom dyeing plants gives us an unmatched opportunity to observe the need of changes in design and to devise ways of meeting these needs.

When you buy Franklin Process package dyeing machines, not only are you buying on performance; you are also buying on performance that can be readily seen and studied as regards its application to your problems.

Prospective purchasers of Franklin Process package dyeing machines are welcome to visit our dyeing plants. They also have the opportunity to conduct experiments in our plants on a practical scale before buying any equipment.

FRANKLIN PROCESS COMPANY

Manufacurers of Package Yarn Dyeing Machines, Jackspool Dyeing Machines, Worsted Top Dyeing Machines, Wool and Cotton Raw Stock Dyeing Machines and Silk Soaking Machines. Also Custom Yarn Dyers.

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Built by practical yarn dyers.

Compensate for uneven package winding (exclusive with Franklin Process machines).

Lower labor cost.

Wide range of adaptability.

Lower rewinding costs in the mill.

Better penetration and more level shades.

Shortest dye bath.

A one kier system, which means less loss from production delays.

Economical loading and unloading.

Simplicity of construction.

All advantages thoroughly explained in our booklet, "Franklin Process Package Dyeing Machines". Write for a copy, using your business stationery.

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No. 402

SOUTHERN
TEXTILE BULLETIN

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Contributions or subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Theodore Price Predicts Inflation

In his weekly letter published September 28th, Theodore Price, editor of Commerce and Finance, has the following to say relative to the probable effect of the abandonment of the gold standard by England:

It is undeniable that Great Britain's action means inflation. Last Monday's cotton market furnished concrete proof of this statement. When the Liverpool Cotton Exchange opened, prices there promptly advanced the equivalent of 100 points or a cent a pound; the concurrent advance in the American markets was only about 30 points.

Cables explained that the suspension of the gold payments meant a higher cost for cotton as expressed in terms of British paper currency, which fell to the equivalent of about $4.00 to the pound sterling during the day. Silver advanced a full penny in London while showing a slight decline in New York. Subsequently silver advanced in this market.

What happened in cotton also happened in most of the other commodity markets, and it seems probable that we shall soon see an important wedging out of the difference between European prices as expressed in paper money and American prices as expressed in gold.

This statement is based upon the history of the past, which reveals that inflation has always followed the abandonment of the gold standard, and that it has sometimes lasted for a very long period.

Upon the evidence available it seems reasonable to expect that in its larger aspects history will repeat itself, and that we shall soon commence to feel the effects that the British action will have upon prices throughout the British Empire, as well as upon the world's trade as a whole.

Munds & Winslow, however, seem to have a different opinion, which is expressed in their weekly letter of September 25th, as follows:

It perhaps is only natural that this big jump in Liverpool cotton prices should have led to some loose talk about inflation of commodity prices. Inflation, it might be stated, is largely the result of two causes. One is depreciated and depreciating currency, and the other is an increase in the effective gold supply. Of course we are going to have commodity inflation in Great Britain in terms of pounds, shillings and pence. These currencies are worth less than they were some time ago, and it remains to be seen whether they will decline further.

If the pound should break further, cotton would advance in Liverpool. In other countries with stable currencies, there would be no such abnormal advance.

We expect no pronounced commodity inflation except as expressed in terms of falling exchange. We see no prospect of that in the United States.

One important fact should be kept in mind emanating from the decline in sterling. We are likely to see the reflection of this decline in lessened buying of American cotton and increased purchases of other growths. Great Britain is going to exchange as little as possible of its depreciated sterling for dollars for the purpose of buying American cotton when it can avoid this by purchases of other growths, particularly Egyptian, Indian and Empire cotton.

Meeting of Southern Textile Association

The Semi-Annual Meeting of the Southern Textile Association will be held at Charlotte, N. C., on October 9th and 10th.

The opening meeting will be a banquet at the Charlotte Hotel at 7 p. m. Friday, October 9th. An address on "Co-operation" will be made by a very gifted speaker, Julian Miller, editor of the Charlotte News, and a program of entertainment will follow.

The banquet charge will be $1.00 per plate and reservations should be made through the Southern Textile Association, Johnston Building, Charlotte, N. C. Traveling men will be welcome—even if they are not members of the Association.

Saturday morning, October 10th, at 10 o'clock, President T. W. Mullen will preside over a session which will be devoted to "Inside Management of Cotton Mills."

H. K. Hallett, Carl R. Harris and J. O. Corn will make addresses which will be followed by open discussion.

Saturday afternoon there will be a football game between N. C. State College and Clemson College.

"Footsie" Parker, one of the tackles of the Clemson team, is a cotton mill boy from the Parker Mill district of Greenville, S. C., while Bob McQuage, the quarterback and star of the N. C. State team, is a son of a man who prior to his death last year was master mechanic at the Kesler Mill, Salisbury, N. C.

Tickets for the football game will be $2.00 and we will be glad to secure reserved seats for those who send us their checks.

Indications are that there will be a very large attendance at the Charlotte meeting of the Southern Textile Association.

INSTITUTE FOR RESEARCH BOOKS

Lancashire Cotton Mills To Reopen

The following is a press dispatch from England:

London.—Directors of four Lancashire cotton mills, two of which have been idle for four years, announced today they would resume operations immediately, employing 1,500 workers. Two blast furnaces will be opened at Barrow on Monday and steel works will be opened a few days later. Liverpool reports record sales of cotton and Birmingham and other industrial centers report business improvement.

This would appear to confirm the statement that the suspension of the gold standard in England would be followed by a period of inflation in that country which would later be reflected throughout the world.

Likewise we notice the following on the market page of the Daily News Record of New York:

Pepperell Manufacturing Company reported on Saturday that it had just completed the biggest individual week since the first of the year. Practically all departments of the company participated in the activity, it was stated—a different department being responsible for a large percentage of the business each day. The fact of the breadth of this buying was regarded as of particular interest. Another phase emphasized is that the greater part of the business last week was for at once or nearby delivery, reflecting that merchandise is yet so generally needed.

Organizing Against Southern Freight Rates

We have the idea that freight rates upon Southern cotton goods are excessive but New York State mill men seem to have a different idea if we are to judge from the following press dispatch:

Utica, N. Y.—The New York State Textile Rate Protective Association was formed at a meeting of mill representatives here today for the purpose of carrying on the fight for rail freight rates which they contend will compare favorably with those available to Southern mills.

The Purchasing Power of the Dollar

It is not how many dollars you get but what you can buy with them that matters.

Taking 1923 as the normal year and figuring on that basis statisticians say that clothing now costs 78.2 per cent of normal; food, 81.9 per cent; housing, 81.5 per cent; fuel and light, 89.6 per cent, and sundries, 95.5 per cent.

In October, 1929, retail food prices averaged 110.1 per cent of normal; housing, 92.3 per cent; clothing, 98.6 per cent; fuel and light, 93.1 per cent, and sundries, 98.3 per cent.

At present, clothing prices are the farthest below normal. The biggest drop since the stock market crash in 1929 has been in food prices, which at that time were more than 10 per cent above normal and now are nearly 19 per cent below normal, a drop of 28.2 per cent.

Clothing has gone down 20.4 per cent in the last two years and is now 21.8 per cent below normal.

Drinking in Colleges

The Des Moines Register says:

R. T. Crane, millionaire iron manufacturer, made public today an arraignment of the big universities of the country. He charges an alarming prevalence of drinking and gaming among the students. . . . Of the students at Harvard, 90 per cent drink in their freshman year, 95 per cent of them in their senior year. . . ."

This will be accepted with acclaim by the opponents of prohibition as showing that the Volstead Act has caused a great increase in drinking among college students. When 90 to 95 per cent of the students drink conditions are bad and it can be rightly claimed that there should be a legalized change.

It happens, however, that the statement by R. T. Crane, as quoted above, was made on September 11th, 1911, just 20 years ago.

There was no Volstead Act and no national prohibition 20 years ago.

Fall Buying Develops Slowly

The market news this week indicates that Fall buying of cotton goods, which has been continually delayed, has been further postponed. There are many indications that buyers are in need of large quantities of goods, but have been so uncertain over the situation that they have continued to defer large purchasing.

Cotton goods prices have already reached a very low point and one which should by all means induce greater consumption. For the time being, the cotton situation and the most recent developments in the world financial situation have checked buying. We are still of the opinion that cotton goods prices will become more stable as soon as the pressure of outside efforts to artificially raise prices is lessened. So much meddling with cotton has added to the uncertainty of prices and destroyed confidence.

With a real need of further cotton goods supplies apparent in distributive channels and the depleted stocks in almost all lines, it is logical to believe that buyers will become active as soon as they feel that the already low prices will not decline further. Some buyers who are too anxious to buy at the very bottom are apt to have to pay higher prices later on.

Despite the inactivity of the market this week, we feel that a much better situation will develop within the next several weeks.

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MILL NEWS ITEMS

WILSON, N. C.—The Wilson Cotton Mills, which have been idle since last spring, have resumed operations.

BRISTOL, TENN.—Between 50 and 75 machine operators have been added to the roster of High Rock Knitting Company here.

"We have been able to place machines in operation that had been idle for months," said I. E. Sagendorf, manager.

RONDA, N. C.—The Hamilton-Wilco Mills, Inc., of this place, which have been closed for three years, have plans under way for reopening their plant. If the plans materialize it is reported that a new addition will also be constructed which will double the present capacity of the plant. It is understood that the stockholders are working on these plans.

GREENSBORO, N. C.—Work is now under way to remove one of the two sets of indigo dye vats in the Proximity Print Works, one of the group of Cone Mills here. Fifteen years ago these vats were turning out indigo for prints for the market of this country, and now, it was stated, there is an extremely limited demand in the United States for printed indigo.

ATLANTA, GA.—Reports of the Southern Natural Gas Corporation show that natural gas is steadily gaining in favor with the textile industry in Georgia and Alabama.

During the past eight months contracts have been signed by the Lawler Hosiery Mills, of Camilla, Ga., for an annual consumption of 7,200,000 cubic feet of gas; by the United States Finishing Company, of Cedartown, Ga., for 3,225,000 cubic feet, and by the Scotch Woolen Mills, of Montgomery, Ala., for 300,000 cubic feet.

SHELBYVILLE, TENN.—Woolsey Knitting Mill is to have a new building of brick, steel and concrete on the Burton Frierson lot, corner of Holland and Dury streets. Ground has been broken already.

The new building will be a one-story structure, 125 by 125, with room for expansion. A substantial increase in business necessitated new and larger quarters, it was stated.

Woolsey Knitting, manufacturers of full-fashion silk hosiery, is running full time, according to reports.

GASTONIA, N. C.—Textiles, Inc., of Gastonia, the combed yarn company formed some months ago through the merger of a number of individual plants, is distributing certificates of stock to shareholders of the various companies which were included in the merger, a number of stockholders here having received their certificates this week.

In a letter accompanying the certificates it is explained that, while the exchange of stocks works out in fractional shares, no certificates are being issued for less than one full share. It is pointed out that stockholders may trade among themselves to eliminate the necessity of issuing fractional shares or that they may make a cash payment for the difference between their fractional shares and one whole share and thus receive a certificate for the latter. Common share certificates received here show a par value of $10 per share.

MILL NEWS ITEMS

GASTONIA, N. C.—The Walker Engineering Company, of this city, has been awarded contract by Textiles, Inc., to remodel the opening room of the Osceola plant No. 1. The work includes remodeling the firewall, roof and floor, as well as increasing height of the present opening room by 5 feet and the installation of two Saco-Lowell vertical openers.

GREENVILLE, S. C.—The 30-odd textile plants of Greenville county are assessed at $11,763,190 for 1931 taxation purposes, according to figures received by County Auditor J. Ben Watkins from the State Tax Commission in Columbia.

WINDER, GA.—According to reports here, the Klimax Overall Company, of this place, which will soon be moved to Athens, Ga., will give employment to approximately 125 to 150 employees at the beginning of operations and will later add more operatives. This plant is under the supervision of C. M. Henson, of Athens.

BURLINGTON, N. C.—The action by C. C. Burd against Flint Hosiery Company, Inc., and the directors for damages on account of alleged fraud and misrepresentation and his effort to place the corporation into receivership came to an abrupt end in the Alabmance Superior Court. Burd failed in his charges of fraud and in showing the corporation to be insolvent. In addition to the allegations of fraud and insolvency of the corporation, he contended that the corporation was indebted to him in the sum of approximately $7,000 for commission on orders obtained by him and filled by the company. The company denied owing him any such sum but, since it desired to have Burd's relations entirely severed from the corporation and to adjust any differences as to the commission which might be due him, the company purchased his stock, allowing him what he paid for it. At the time Burd's connection with the corporation was severed, the management offered to repurchase his stock at the purchase price but he declined to do it and filed suit.

S. T. A. Meeting to Draw Large Crowd

The semi-annual meeting of the Southern Textile Association, to be held in Charlote on the night of October 9th and the morning of the 10th, is expected to be very well attended. Reservations are coming in rapidly and all members and guests who have not made reservations for the dinner are being urged by Secretary Taylor to make them as promptly as possible.

The program, which will deal with co-ordination of effort within the mill, will be featured by addresses by Carl R. Harris and J. O. Corn, both former presidents of the Association, and H. K. Hallett, general manager of the Southern group of the Kendall Mills.

The Houghton Line

The second issue of the "Houghton Line," published by E. F. Houghton & Co., Philadelphia, since publication was resumed, has been distributed. The Houghton Line was founded by the late Chas. E. Carpenter, president of the Houghton Company, and under his editorship became one of the best known house organs in America.

1894 1931

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A special Tannage possessing higher tensile strength, better pulley adhesion and greater flexibility than Oak Belting.

It is particularly adapted to difficult drives when small pulleys or idlers are necessary. This type of Belting is recommended for unusual conditions of steam, hot water, oil, dilute acids or alkalies.

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Branch Office and Warehouse
162-166 North Clinton Street, Chicago, Ill.

Makers of a Complete Line of Leather Belting

Improved Equipment and Processing in the Manufacture of

EAGLE STARCH

has achieved

1—GREATER UNIFORMITY of moisture content and fluidity of paste. While Eagle Starch always has been approved for its uniform quality, the new Eagle Starch is controlled within still narrower limits. Every package is absolutely uniform in moisture and fluidity.

2—REDUCED SEDIMENT or residue. Especially designed equipment has resulted in the elimination of practically all sediment—which means smoother, cleaner size. Try a "creaming" test.

3—ABSENCE OF SOLUBLE SUBSTANCES which have no starch value. By additional washings, soluble impurities have been removed from the new Eagle Starch.

4—CLEANSING OF THE AIR used for drying starch is an innovation. In manufacturing the new Eagle Starch, the finest particles of dust and dirt that are in the air are removed prior to using this air for drying Eagle.

•

For best results, always be sure that starch is thoroughly "creamed" by stirring with cold water before admitting steam. For further information, please write

CORN PRODUCTS REFINING CO.
17 Battery Place, New York, N. Y.

Publication was discontinued for a time after Mr. Carpenter's death, but was recently resumed. The Line is now edited by Louis E. Murphy, president of the company, and bids fair to regain the unique place it won under direction of Mr. Carpenter.

OBITUARY

W. HARRY WYLIE

W. Harry Wylie, well known textile man of Charlotte, died last week following a brief illness. Until two years ago he was an engineer with the Southern offices of Crompton & Knowles Loom Works, having served with that company for a number of years. Mr. Wylie was a graduate of Clemson College and Cornell University and was widely known in the textile industry. He was 43 years of age and is survived by his wife, one son and one daughter.

R. & H. Personnel Transfers

The following members of the research staff of The Roessler & Hasslacher Chemical Co., Inc., has been transferred from the plant at Perth Amboy, N. J., to the Niagara Falls, N. Y., plant within the past three months: Dr. Sterling Temple, Dr. B. S. Lacy, Dr. A. M. Muckenfuss, Dr. J. F. Reichert, Dr. C. J. Wernlund, A. T. Hawkinson, A. W. Rudel, J. M. Wainscott, H. A. Bond. Other transfers to the Niagara Falls plant include: from Perth Amboy—P. M. Paulson, patent specialist; M. Mareon, librarian; from the New York office—I. L. Ressler, entomologist.

H. W. Butterworth & Sons Co. Change Offices in Providence

Due to the amount of textile business which has been showing itself in New England recently, H. W. Butterworth & Sons Company have found it necessary to change their office from 1202 to 1409 Turks Head building, Providence, R. I.

The company feels that by changing to these new quarters they will be in even a better position to look after their friends and customers than in their former offices.

Rooster Crows When Mill Whistle Blows

Kinston, N. C.—Some weeks ago a hen at Brinkely's home laid a fresh egg. One side was rather flat. There were ridges on it, forming a likeness to a clock dial. The ridges were a circle and an even dozen protrusions corresponding to the numerals on a clock's face.

Brinkley allowed the egg to remain under the broody hen that laid it. From it emerged a chick. The chick became a rooster. The rooster started crowing ten days ago.

Brinkley was astounded and delighted to discover that it crowed at 6 a. m., 12 noon and 6 p. m.—on the dot. He told his friends. Some of them dropped in and were amazed to hear the cockerel crow at the times he said it would.

But Brinkley, who is master of the hounds of the local fox hunt club and well known in sporting circles, made the disappointing discovery that the whistle of a mill near his home is sounded at 6 a. m., noon and 6 p. m. daily and that the young rooster would not crow except when incited by the whistle. The mill workers had a half day off. There was no blast from the whistle. And there was not a sound from the rooster.

India Grows All Cotton She Needs, Declares Gandhi

"India now fills its own cotton requirements and grows all she needs," declared Mahatma Gandhi in an interview with the United Press when he stopped at Marseilles while en route to the British Government's round table conference on India in London.

"Our manufacture of cotton cloth is increasing every day," he added. "India no longer is an easy market for the world's cotton growers."

He insisted he was unafraid to visit Lancashire in England, despite the threat of cotton spinners there to lynch him.

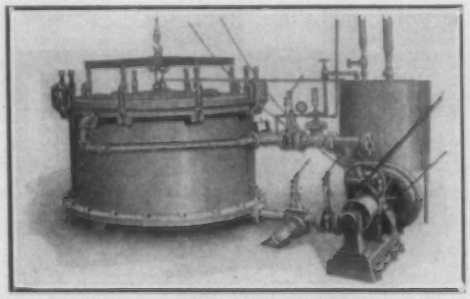
May We Send You Our Best Advertisement?

—which is merely a FREE sample supply of Victor Ring Travelers, to try out on your own frames, on your regular work, or better yet on special work where you may have been having trouble. State size and style . . . We'll do the rest. Without a cent of cost to you.

VICTOR RING TRAVELER COMPANY
20 Mathewson St. Providence, R. I.

Southern Agent, A. B. CARTER
Room 615, Commercial Bldg., Gastonia, N. C.
Southern Representatives
A. Dewey Carter ..... Gastonia, N. C.
N. H. Thomas ..... Gastonia, N. C.
B. F. Barnes, Jr., 520 Angier Ave., N. E. ..... Atlanta, Ga.

MORTON RAW STOCK DYEING and BLEACHING MACHINE



Belt or Motor Driven

Why try to "get by" with obsolete dye equipment when others who use the "MORTON" Improved "get ahead"?

We will be glad to explain why and how this is being done.

Don't let competitors kill you—do your own dyeing on a "MORTON" Improved.

Manufactured by

MORTON MACHINE WORKS

Columbus, Ga.

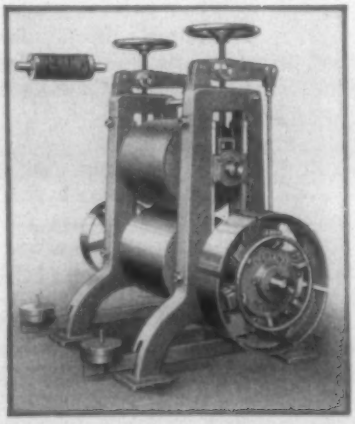
East: JOSEPH BARNES, New Bedford, Mass.; N. C., S. C., Va., and Tenn. Representative: CAROLINA SPECIALTY CO., Charlotte, N. C.

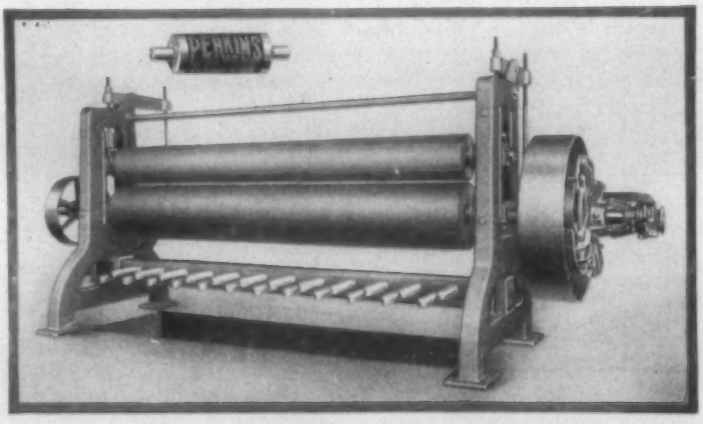
PERKINS Bleach House Equipment

Perkins builds the highest grade of Washers and Squeezers, equipped with either plain or roller bearings.

They are extremely flexible in design and outstandingly rugged in construction.

The photographs show this equipment as recently installed in the two latest finishing plants in the country.





B. F. Perkins & Son, Inc., Holyoke, Mass.

Engineers and Manufacturers

Southern Representative: Fred H. White, Independence Bldg., Charlotte, N. C.

Rolls—Cotton, Paper, Husk, Combination, Cotton and Wool

Calenders	Dyeing Machines	Singers
Drying Machines	Padders	Squeezers
Starch	Ranges	Tenters
Water and Tommy		Washers
Dodd Mangles	Scutchers	Winders

Georgia Meeting Discusses Slashing, Weaving and Mechanical Questions

(*Continued from Page* 13)

of the warp threads two or three inches from selvage and prevent the cloth from showing baggy in the center?"

Mr. Thompson: The best thing is to put in a heavy drag roll and reinforce your reed cap. That will help it a good deal. I have not found anything to get it all out. We run pretty heavy stuff, 19-ounce, 60 inches, and that is the only thing we have found—put in heavy drag rolls, and reinforce your reed cap. That will help it some.

A Member: Where you are weaving a narrow piece of goods on a wide loom, you will always have more trouble.

A Member: A difference in the spread of the reed will make a difference in the bagging.

Variation in Sheeting

Chairman: That seems to be the general opinion.

We will pass to our last question in the weaving discussion, and which is as follows:

"Why does a piece of heavy sheeting 90 inches wide vary almost an inch during the weaving? What is the best way to control this?"

Mr. Thompson: We have friction let-offs on our looms, and the beams are kept up pretty well. We don't have as much variation as we used to have, but it will vary some.

How Many Looms to Section?

Chairman:

"Should loom sections be made large enough to keep the best fixers busy and force the weaker ones to get by the best they can?

Mr. Cobb, of Canton, sends in an answer: We arrange our loom sections for the average fixer, and not for the best. We have some that keep the job jam up and apparently loaf part of the time, while some others have to work all of the time to keep up. If we try to keep the best ones busy, the weaker ones would have to slide by to get by at all. A good fixer keeps ahead of his job and he will run the job instead of letting the job run him. He will fix parts before they break.

Mr. Powell: I think they ought to be arranged to suit the average fixer.

Chairman: You will find this—after the loom is set properly and then you go away, on positive let-offs, and before that is ready for that same cut, we just naturally change without changing anything on the loom again.

Chairman: Can you tell us about that, Mr. Barnes?

Cliff Barnes, Atlanta: Any motion any loom, if controlled, would give you a regular let-off clean through, and I don't know of anything else that would cause it. If you have not got a regular let-off, if you take up part of the let-off, then it goes to a lower ring. I don't know of anything else.

Mr. Rogers: You mean change of delivery?

Mr. Barnes: Yes. That will affect it a whole lot, too. When you change from high picks to a low pick, we have a lower let-off. We have down to 18 picks. If a man had a slow let-off, he would have variation, but by changing to this low rate we would stay pretty even.

DISCUSSION OF MECHANICAL AND ELECTRICAL QUESTIONS

(Led by Mr. Lindsey)

Chairman Lindsey: The first question is as follows:

Consumption of Coal Per Horsepower

"How many pounds of coal should it take to a horsepower where a plant is operated entirely by steam? State type of equipment and feed."

Mr. Thompson: He ought to get on an average about two.

Mr. Heymer: Some years ago I made a test and we got 4¼ pounds from coal consumption on one coal. Then we used a higher grade of coal and got three pounds. So I think it is the B. T. U. that it contains that governs how many pounds you get. Four and one-quarter has been the average we have been getting.

Question: Condensing?

Mr. Heymer: Yes.

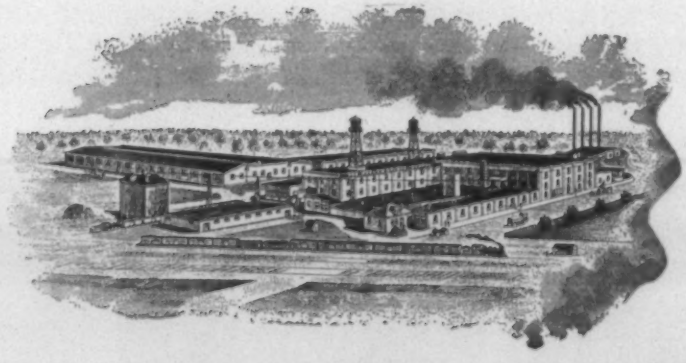
Chairman: You can get coal as low as 11,000 B. T. U. and a coal as high as 14,500, and use either, and there is a difference there.

Mr. Heymer: Our coal concern gets a penalty for less than 14,500 and we pay a premium over 14,500. We get a better consumption and only three pounds for horse power. That would guarantee 14,500 B. T. U.

Welding Cast Iron and Steel

Chairman: The next question is:

VICTOR MILL STARCH—The Weaver's Friend



It boils thin, penetrates the warps and carries the weight into cloth.

It means good running work, satisfied help and one hundred per cent production.

We are in a position now to offer prompt shipments.

THE KEEVER STARCH COMPANY

COLUMBUS, OHIO

DANIEL H. WALLACE, Southern Agent, Greenville, S. C.

C. B. ILER, Greenville, S. C. F. M. WALLACE, Columbus, Ga. L. J. CASTILE, Charlotte, N. C.

"Can cast iron and steel be successfully welded together with cast iron?"

Answer: Yes; you can weld it, but it is not practicable.

Chairman: Would you use that where you had a strain, say on a loom frame, or a place like that?

Answer: No, sir.

A Member: You can weld a piece of steel and a piece of cast iron, and under a strain the steel will stick there, and the cast iron will break off each side of the steel. It crystallizes it.

Chairman: The next question is also on welding:

"Which will make the best weld for a piece of cast iron—to be ground out, chiseled out, or burned out with a torch?"

Answer: I would say ground out or chiseled out.

Another Answer: Burned out I think would be more practicable.

Chairman: Burning it is the worst he can do. If he melts it out, all right. If he don't get it any hotter than to weld, it is all right. Most welders usually melt out.

A Member: They can melt much cheaper and quicker.

Member: You can work it better if you chisel it out or grind it out. You can work your weld better. You will get a better weld. You can work it better, too.

Member: In some cases it is impracticable to grind.

Cleaning Slate Switchboard

Chairman: The next question is:

"What have you found to be the best method for cleaning a slate switchboard with oil on it? What is best to use for this purpose?"

Answer: Carbon tetrachloride.

Another Answer: Cooking soda will clean it.

Chairman: How do you use that tetrachloride?

Answer: Just put it on damp waste and put it on and it will bring it all out.

Answer: We take a piece of oil waste and get it all off. It makes a better looking switchboard. You can use almost any kind of oil. Don't put too much on there, but just enough to get the surface shiny.

Question: What about that collecting dust?

Checking Air Gaps in Motion

Chairman: Any information on that? (No response.) Any questions? (No response.)

The next question is:

"What method do you use, and how often do you check air gaps in motors, also compensators? What tolerance should be allowed?

Mr. Heymer: I should say it ought to be checked up every time the motor is blown out. Carry a gauge along and you can catch it before it goes too far.

Member: I check mine about every three months and keep a record and you can tell whether it is going down.

Member: I check mine every three months.

Question: What air pressure do you use, and how close do you come to the nozzle?

Mr. Heymer: We use between 30 and 40 pounds of pressure.

Member: We carry 60 to 80.

Member: We carry from 60 to 80. We blow both sides at the same time. We have two men blowing at each end.

Cleaning Coils in Motors

Chairman: Is there any other question to be asked on this? We will pass to the last question, which is as follows:

"What have you found to be the best preparation for cleaning and protecting coils in motors?"

Somebody answer that?

(*Continued on Page* 29)

AKTIVIN-S

REG. U.S. PAT. OFF.

Here is why AKTIVIN-starch size saves you money!

1. Starch is broken down just to "Soluble starch", resulting in a pronounced saving of starch particles.
2. Thorough penetration and even covering of warp adds greater tensile strength, which reduces breakage of threads.
3. Permits speedier loom performance.
4. AKTIVIN-starch size does not separate or decompose overnight. Re-heating brings back fluidity.
5. Germ-killing action of AKTIVIN-S prevents mouldiness.

AKTIVIN-S is proving a profitable, money-saving investment in every mill that has adopted it. Complete details of the advantages of the uses of this effective p oduct . . . AKTIVIN-S . . . sent upon request. Also generous test sample.

THE AKTIVIN CORPORATION
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MERROWING

—Established 1838—

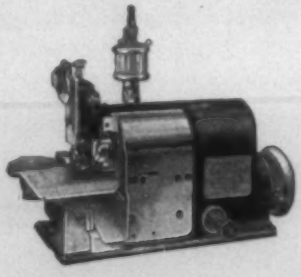
will fill your need for

FLAT BUTTED SEAMS

to join ends of piece goods prior to processing—demanded more and more by converters and valuable in your own processing.

Send for details regarding

Merrow Styles 60 ABB and 60 D3B



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Trade Mark
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Let us demonstrate the work of these and other machines on your own fabrics.

THE MERROW MACHINE CO.
8 Laurel Street Hartford, Conn.

Southern Cotton Parley Set For Nov. 16-18

Columbia, S. C.—J. S. Wanamaker, president of the American Cotton Association, announces that the Southwide convention of cotton farmers and others, scheduled to be held in New Orleans, October 1 3, has been postponed until November 16 to 18. The convention was called two months ago to complete plans for cotton acreage reduction next year. Mr. Wannamaker said delegates representing farmers, bankers, merchants and others interested in cotton had pledged attendance and support of the curtailment program.

Pacific Adopts Night Schedule

Columbia, S. C. — The Pacific Mills, Hampton division, announce that night operations have been started at their plants here as a means of affording employment to a number of former employes. Work at the mills is expected to relieve local conditions to some extent. The plants here included in the Hampton division of the Pacific Mills are: Capital City, Granby, Olympia and Richland Mills.

Officials advised textile workers in other communities not to come to Columbia, as the additional employment will only include former workers now placed.

Attractive Excursion Fares
VIA
Southern Railway System
Friday, Oct. 9th

Round Trip Fares From
CHARLOTTE, N. C.

New York	$14.00
Philadelphia	12.00
Atlantic City	13.00
Pittsburgh	15.00

Limit October 12th
Tickets good in Coaches only

Washington	$12.50
Baltimore	14.50
Norfolk	9.00
Richmond	8.00

Limit October 14th
Tickets good in Pullman Sleeping and Parlor Cars upon payment of Pullman charges

Ask Agents
Southern Railway System

INDEX TO ADVERTISERS

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

SHEEP SKIN
GILL LEATHER *for* TOP ROLLS
means MORE PROFIT
because BETTER YARN, FEWER BREAKS, *and* FASTER PRODUCTION
Southern Representatives
Ralph Gossett, Greenville, S. C.
Hamner & Kirby, Gastonia, N.C.
Benton C. Plowden, Griffin, Ga.
GILL LEATHER CO.
SALEM, MASS.
ROLLER LEATHERS FOR FOUR GENERATIONS

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Washington, D. C.
Also Winston-Salem, N. C.

Georgia Meeting Discusses Slashing, Weaving and Mechanical Questions

(*Continued from Page 27*)

Answer: Pyrene.

Chairman: Does it clean it?

Answer: Yes, sir.

Chairman: Do you find it better than gasoline?

Answer: I don't put gasoline on motors. We won't allow any gasoline in our mill. It is against rules to take any in there under any conditions.

Chairman: Some use pyrene and gasoline, making a mixture.

A Member: I use practically the same thing as pyrene. We have an air gun and spray it on.

Chairman: Do you use a spray like a paint spray, or regular spray?

Answer: Regular spray. It is a motor cleaner. We use an air-dry for base to put on with air spray.

Question: Do you find that air-dry becomes oil-soaked again?

Answer: No, sir. You have to let it dry anywhere from 8 to 16 hours. As a matter of fact it is claimed that it should have 6 to 12 hours to dry.

Chairman: Have you used any Bacon varnish?

Answer: No, sir.

A Member: Another way to clean it is to take it down and clean the parts. There is nothing I have ever put on there that prevents this winding from taking oil.

Cotton Goods Sales Larger

By Hunter Mfg. & Commission Co.

Our sales this week have again been in excess of production, this time by about 10 per cent. There has been a decided increase in the volume of print cloth business this week. Although prices have recorded a further drop of 1/8c, more print cloths have been sold this week than in any week since the last of June. These sales were mostly for quick and October delivery. There was a good volume of business in narrow sheetings, largely for the bag trade and other manufacturing purposes, also of wide goods for manufacturing trades. Broadcloths continued active though scarcity of goods for early delivery kept sales below last week's level. Sheets and pillowcases were conspicuously active and towels moved in good volume.

Generally speaking, the fall business has been slow in coming in. Cutters, converters and jobbers still have a quantity of goods to buy for delivery during the next three months and it looks as if the customary heavy September and early October volume would be distributed this year between September, October and, possibly, early November. In many grey goods constructions the spot situation has continued to grow gradually tighter though not enough so yet to attract more than passing comment but, as the volume of unfilled orders is built up, this situation will begin to make itself plain at all.

The dropping of the gold standard by Great Britain has added, for the time being at least, to the uncertainties concerning values. It has led to record breaking sales of spot cotton in the Liverpool market, and in connection with the advance in silver has brought about a decidedly better feeling in Manchester concerning the Far Eastern trade. Just what effects it will have on our country is still uncertain.

Stocks registered a very rapid advance on Wednesday and an equally rapid decline Thursday, showing the confusion that exists. It would hardly seem that it could affect Great Britain's export trade favorably and at the same time be favorable to ours.

SUPERINTENDENTS AND OVERSEERS

We wish to obtain a complete list of the superintendents and overseers of every cotton mill in the South. Please fill in the enclosed blank and send it to us.

_____, 193____

Name of Mill _____

Town _____

_____ Spinning Spindles _____ Looms

_____ Superintendent

_____ Carder

_____ Spinner

_____ Weaver

_____ Cloth Room

_____ Dyer

_____ Master Mechanic

Recent changes _____

_____

AKRON

Leather Belting

Most Economical

Once Tried
Always Specified

The Akron Belting Co.

Akron, Ohio

BRIGGS-SHAFFNER COMPANY

Winston-Salem, N. C.

MECHANICAL ENGINEERS
FOUNDERS AND MACHINISTS

Builders of Fine Textile Machinery

We solicit your inquiries for Machinery and Castings

BARKLEY MACHINE WORKS

Manufacturers of Textile Machinery Parts

Cut Gears—Cast Tooth Gears

Parts for Kitson Pickers, Nasmith Combers, Whitin Combers. General Textile Repairs.

North Marietta Street

Gastonia, North Carolina

Machines for

- Cutting
- Lacing
- Repeating
- Jacquard Cards

JOHN ROYLE & SONS
PATERSON > NEW JERSEY

DO NOT CONFUSE . . .

Wissco NonStrip *Card Clothing*

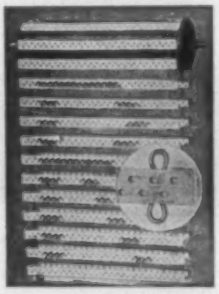
U. S. Patent No. 1759563

With Other Types of Straight Wire Clothing.

Wickwire Spencer Steel Company
41 East 42nd Street, New York City
Buffalo Detroit Chicago Philadelphia Cleveland Worcester Tulsa

Pacific Coast Headquarters: San Francisco

Branches and Warehouses: Los Angeles, Portland, Seattle



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We also Manufacture

Dobby Loom Cords and Pegs

Rice Dobby Chain Company
Millbury, Mass.

SEYCO

Seydel-Woolley Company
ATLANTA

Textile Chemicals For Best Weaving

A Concern is Known by the Customers It Keeps

Wearing Cotton Garments Once Prohibited By Law

(By J. B. Hicklin, in Charlotte Observer)

Now that definite proposal for a "cotton growing holiday," forbidding cultivation of the staple in the South for a designated period has been made, it is interesting to turn back the page of history and learn that wearing of cotton garments was at one time forbidden under penalty of fine or imprisonment.

The American Union, published at Griffin, Ga., in the isue of January 20, 1853, presents an editorial "Crimes of Cotton," quoting at length from a newspaper of 1843, as follows:

"Now that scarcely a civilized individual exists in any part of the world who does not wear cotton in some form or other, we may well wonder when we are told of the inveterate opposition with which its first introduction and use in this country was met. Under pretense of encouraging our woolen manufacturers, laws were enacted to forbid cotton being worn by gentle or simple upon pain of fine or imprisonment. Cotton, associated with protectionist principals, has, among other enormities, been the occasion of riot and bloodshed. Whenever distress fell upon the laboring population it was the fashion, not much more than a century ago, to attribute it to cotton. In the old time the ruin of the country and the irretrievable misery of 'millions yet unborn,' was predicted over and over again from the spinning and weaving of cotton."

Traced Crimes to Cotton

The most remarkable of these prophecies was delivered by a criminal from the scaffold on the eve of execution. He traced all of his crimes and misfortunes simply to cotton. In the Gentlemen's Monthly Intelligencer for 1734 we find under date of May 3, the following letter:

"From Cork in Ireland.

"This day one Michael Carmody was executed here for felony; upon which the Journeymen Weavers of this city (who labor under great difficulties by reason of the deadness of trade; occasioned by the pernicious practice of wearing cottons), assembled in a body and dressed the criminal, hangman, and gallows in cottons in order to discourage the wearing thereof; and at the place of execution the criminal made the following remarkable speech:

" 'Give ear, O good people, to the words of a dying sinner: I confess I have been guilty of many crimes that necessity compelled me to commit, which starving condition I was in, I am well assured, was occasioned by the scarcity of money, that has proceeded from the great discouragement of our woolen manufacturers.

" 'Therefore, good Christians, consider that if you go on to suppress your own goods, by wearing such cottons as I am now clothed in, you will bring your country into misery, which will consequently swarm with unhappy malefactors as your present object it; and the blood of every miserable felon that will hang, after this warning from the gallows, will lie at your door.

" 'And if you have any regard for the prayers of an expiring mortal, I beg you will not beg of the hangman, the cotton garments that now adorn the gallows, because I can't rest quite in my grave if I should see the very things worn that brought me to misery, thievery, and this untimely end; all which I pray of the gentre to hinder their children and servants for their own character's sake, tho' they have no tenderness for their country, be-

cause none will hereafter wear cotton but oyster-women, criminals, hucksters, and common hangmen.'"

EARLY COTTON PLANTING

Cotton was planted only in small patches in the South until after the Revolutionary war. Even then it was produced on a very small scale. As late as 1791 the United States exported only 391 bales annually. Seven years before eight bags of hand-ginned cotton were shipped to England for sale, but were seized on the ground that so much cotton could not have been produced in the United States.

Sea-bound cotton was first raised on the Atlantic coast, the staple being easier to pick from the seed. The seed for these crops had been secured from the Bahama Islands.

Upland, or short-staple, cotton grown in the back-country adhered very firmly to the seed. Not more than a pound of the lint could be picked by a person in a day and a large family had to be nimble-fingered to pick out eight or ten pounds a day. Comparatively little of the staple was therefore grown prior to the invention of the cotton gin by Eli Whitney.

"About this time a young man named Eli Whitney was living in Georgia at the home of Mrs. Nathanael Greene, 14 miles above Savannah. He was born in Massachsetts, and, having just graduated at Yale College, had come South towards the end of 1792 to teach school and practice law. Mrs. Greene had invited him to make her house his home. While there he had made several things that gave her confidence in his power of invention.

"One day some visitors at the house of Mrs. Greene were regretting that it was such a hard matter to clain the upland cotton, and said that it was a pity that there was no machine for this purpose. Mrs. Greene said: 'Ask Mr. Whitney to make a machine for you; he can make anything.' Some raw cotton and see were given to Whitney, who had never seen any up to that time. He at once set to work to see what he could do.

THE GIN IS MADE

"He labored for several months under much difficulty. He had to make his own wire and tools. At last he made a machine that would clean the lint from the seed. Mrs. Greene and another friend were the only persons permitted to see the machine, but others heard of it and were so anxious to know how it would work that before it was quite finished the shop was broken open and his model carried off. The result of this was that Whitney's idea became known, and before he could make another machine and get it patented there were others in operation based upon his invention. Whitney made another machine which was a complete success.

"After the gin was invented, Whitney established his machines in various places in Georgia for the purpose of buying and ginning cotton. One of these was near Augusta, about two miles south of the city. The dam is still seen which held the water to furnish the power. Whitney's machines were the first called cotton engines, but this name was soon contracted into 'cotton gins.'

"Whitney secured a patent on his invention March 14, 1794. Very soon a number of other men began to claim that they had made gins before Whitney's gin appeared. Whitney tried to enforce his rights under the patent issued to him. Within the next few years he became involved in many lawsuits.

"He complained bitterly that he could not get his rights in the courts. The juries generally decided against him, probably because the patent system, which at that time was just beginning, was not understood. These lawsuits cost Whitney so much that he was never made any richer by his great invention."

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COTTON GOODS

New York.—Cotton goods, at lower prices, were in better demand than during the previous week and sales were larger. In some houses, sales were larger than production. The erratic cotton and stock markets which developed following the new phases in the world financial situation, were held responsible for lower goods prices. At the same time, a good many men, in discussing the market situation, express the opinion that delayed seasonal buying when it does get under way, is likely to carry prices higher.

In print cloths certain of the largest mill centers exceeded production. The week, in other words, totaled a larger volume than any week since the activity of late June and early July. Where that movement was precipitate and bouyant the buying the past 10 days has been well-considered, cautious, even hesitant. In a great many instances, buyers made it plain they were restricting their purchases to "essentials only." Under the circumstances, sellers said they could not expect otherwise. There was, first of all, the deterrent of unfavorable outside influences and there was, secondly, the price declines that actually took place in our own market. Print cloths, instance, were down an eighth to a quarter of a cent and with each concession there was a flurry of buying.

Inquiry in the fine goods divsion continued light with sales limited to spot orders in small volume. The market continued to emphasize the apparent unwillingness of buyers to book goods in any quantity until they have some indication of the movement of finished goods. Moreover, when bids are made they are figures fractionally under the market. A great deal of checking on prices is indulged in, with, in many cases, little or no inclination to buy. In the acetate division sales were made and the market heard of actual sale prices rather than merely asking prices.

Prices were as follows:

Print cloths, 28-in., 64x60s	2⅞
Print cloths, 27-in., 64x60s	2⅞
Gray goods, 38½-in., 64x60s	4
Gray goods, 39-in., 68x72s	4⅝
Gray goods, 39-in., 80x80s	5⅜
Brown sheetings, 3-yard	5½
Brown sheetings, standard	6¼
Brown sheetings, 4-yard, 56-60s	5½
Tickings, 8-ounce	13
Denims	9½
Dress ginghams	10½a12
Standard prints	7
Staple ginghams	7½

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YARN MARKET

Philadelphia, Pa.—There was an improving tendency in the yarn market last week. Inquiry was more active and sales were larger than they have been in most recent weeks. Prices remained on about the same basis as during the preceding week. Few buyers were willing to go beyond actual needs but inquiry showed that some of them were more interested in contract business than has been the case for some time.

Weavers were in the market with fair frequency and the average size of their orders was somewhat ahead of that during recent weeks. The view is expressed here that stocks continue small and that any marked increase in buying should allow spinners to get a better margin. The hosiery knitters have been buying in somewhat better quantities, but have held to spot and nearby deliveries.

A few sales of more importance were noted, chiefly in carded and combed yarns for some of the knitting trades. It was stated in some quarters that two-ply combed peeler skeins and warps had remained virtually unchanged in price since Monday, though single yarns have shown some strength.

Mercerized yarns are in somewhat better movement, although in some quarters there appears to be much disappointment over the slowness of recovery from the sluggish summer market. A slight improvement in the call for dyed mercerized is regarded as meaning there has developed more business in sports hose for juveniles and novelty half hose.

A half dozen or less Philadelphia yarn merchants, about the later part of last week, had aggregate sales of around 190,000 pounds, the movement embracing carded and combed, the latter, it may be stated, changing hands at probably the lowest price for September, after the list had been twice revised downward following the cotton crop report of the 8th.

Prices in this market at the end of the week were quoted as follows:

Southern Single Warps.

10s	14½a15
12s	15 a
16s	17 a
20s	17 a
26s	19½a20
30s	20½a21

Southern Two-Ply Chain Warps.

8s	14 a14½
10s	14½a15
12s	15 a
16s	16 a
20s	17 a
24s	19 a
30s	21 a
36s	26½a
40s	28 a
40s ex.	31 a

Southern Single Skeins.

8s	14 a14½
10s	14½a15
12s	15 a16
14s	15½a
16s	17 a
20s	17 a
24s	10 a
26s	20½a
40s ex.	31 a
30s	20½a21

Southern Two-Ply Skeins.

8s	14 a14½
10s	14½a15
12s	15 a
14s	15½a
16s	16 a
20s	17 a
24s	19 a
26s	20 a20½
30s	21 a
40s	27½a
40s ex.	31 a
50s	37 a
60s	43 a

Duck Yarns, 3, 4 and 5-ply.

8s	14½a
10s	15 a
12s	15½a
16s	16½a17
20s	17½a18

Carpet Yarns.

Tinged Carpet, 8s, 3 and 4-ply	13 a13½
White Carpet, 8s, 3 and 4-ply	14 a14½
Colored Strips, 8s, 3 and 6-ply	14½a15

Part Waste Insulating Yarn.

8s, 1-ply	12½a
8s, 2, 3 and 4-ply	12½a
10s, 1-ply and 3-ply	13½a
12s, 2-ply	13½a14
16s, 2-ply	15 a
20s, 2-ply	16½a
26s, 2-ply	18 a
30s, 2-ply	10 a

Southern Frame Cones.

8s	14½a
10s	14½a15
8s	14 a
10s	14 a
12s	14½a
14s	15 a
16s	15 a
18s	15½a
20s	16 a
22s	16½a
24s	18½a
26s	19½a
24s	17½a
26s	18½a
28s	19½a
30s	20½a
30s	19 a
30s	22 a

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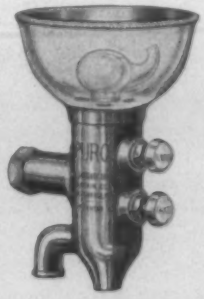

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OAKITE PRODUCTS, INC., New York, N. Y. Sou. Div. Office and Warehouse, Atlanta, Ga., L. W. McCann, Div. Mgr., Atlanta, Ga.; E. Moline, Augusta, Ga.; R. H. Bailey, Memphis, Tenn.; H. J. Canny, Greensboro, N. C.; L. H. Gill, New Orleans, La.; W. A. McBride, Richmond, Va.; P. F. Wright, Chattanooga, Tenn.; J. C. Leonard, Div Mgr., St. Louis, Mo.; W. B. Mix, Dallas, Tex.; C. A. Ormsby, Indianapolis, Ind.; G. C. Polley, Houston, Tex.; H. J. Steeb, St. Louis, Mo.; G. W. Tennyson, Peoria, Ill.; B. C. Browning, Tulsa, Okla.; R. M. Browning, Kansas City, Mo.; H. Bryan, Oklahoma City, Okla.; C. L. Fischer, St. Louis, Mo.

PARKS-CRAMER CO., Fitchburg, Mass. Sou. Office and Plant, Charlotte, N. C., W. B. Hodge, V.-Pres., M. G. Townsend, Sou. Mgr. Sou. Reps.: W. H. Burnham, O. G. Culpepper and H. B. Rogers, Charlotte Office; J. F. Porter, P. O. Box 1355, Atlanta, Ga.

PERKINS & SON, INC., B. F., Holyoke, Mass. Sou. Rep.: Fred H. White, Independence Bldg., Charlotte, N. C.

PLATT'S METALLIC CARD CLOTHING CO., Lexington, N. C. U. S. Agent, F. L. Hill, Box 407, Lexington, N. C. Sou. Reps.: W. F. Stegall, Cramerton, N. C.; R. L. Burkhead, Varner Bldg., Lexington, N. C.

ROCKWEAVE MILLS, LaGrange, Ga., Wm. H. Turner, Jr., V.-Pres. and Gen. Mgr. Sou. Reps.: Carolina Specialty Co., Charlotte, N. C.; Hamner & Kirby, Gastonia, N. C.; J. M. Tull Rubber & Supply Co., 285 Marietta St., Atlanta, Ga.; Young & Vann Supply Co., 1725 First Ave., Birmingham, Ala.; Mills & Lupton Supply Co., Chattanooga, Tenn.; Nashville Machine & Supply Co., Nashville, Tenn.; Montgomery & Crawford, Spartanburg, S. C.; Sullivan Hdw. Co., Anderson, S. C.; Noland Co., Inc., Roanoke, Va.

SACO-LOWELL SHOPS, 147 Milk St., Boston, Mass. Sou. Office and Repair Depot, Charlotte, N. C., Walter W. Gayle, Sou. Agent; Branch Sou. Offices: Atlanta, Ga., Fred P. Brooks, Mgr.; Spartanburg, S. C., H. P. Worth, Mgr.

SARGENT'S SONS CORP., C. G., Graniteville, Mass. Sou. Rep.: Fred H. White, Independence Bldg., Charlotte, N. C.

SEYDEL CHEMICAL CO., Jersey City, N. J. Sou. Warehouse, Greenville, S. C. Sou. Reps.: W. T. Smith, Box 349, Greenville, S. C.; O. H. Jones, Browns, Ala.; I. G. Moore, 301 N. Market St., Dallas, Tex.

SEYDEL-WOOLLEY CO., 748 Rice St., N.W., Atlanta, Ga.

SHAMBOW SHUTTLE CO., Woonsocket, R. I. Sou. Rep.: M. Bradford Hodges, Box 752, Atlanta, Ga.

SIPP-EASTWOOD CORPORATION, Paterson, N. J. Sou. Rep.: Carolina Specialty Co., Charlotte, N. C.

SIRRINE & CO., J. E., Greenville, S. C.

SOLVAY SALES CORP., 61 Broadway, New York City. Sou. Reps.: Chas. H. Stone, 822 W. Morehead St., Charlotte, N. C.; Burkhart-Schier Chemical Co., 1202 Chestnut St., Chattanooga, Tenn.; Woodward Wight Co., 451 Howard Ave., New Orleans, La.; J. A. Sudduth & Co., Birmingham, Ala.; Miller-Lenfestey Supply Co., Tampa, Miami and Jacksonville, Fla.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C., Wm. H. Monty, Mgr.

STANLEY WORKS, THE, New Britain, Conn. Sou. Office and Warehouse: 552 Murphy Ave., S.W., Atlanta, Ga., H. C. Jones, Mgr.; Sou. Reps.: Horace E. Black, P. O. Box 424, Charlotte, N. C.

STEEL HEDDLE MFG. CO., 2100 W. Allegheny Ave., Philadelphia, Pa. Sou. Office and Plant: 621 E. McBee Ave., Greenville, S. C. H. E. Littlejohn, Mgr. Sou. Reps.: W. O. Jones and C. W. Cain, Greenville Office.

STEIN, HALL & CO., INC., 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C. Ira L. Griffin, Mgr.

TERRELL MACHINE CO., Charlotte, N. C., E. A. Terrell, Pres. and Mgr.

TEXTILE DEVELOPMENT CO., THE, 1001 Jefferson Standard Bldg., Greensboro, N. C. Sidney S. Paine, Pres. Ga.-Ala. Rep., Robert A. Morgan, Rome, Ga.

TEXTILE-FINISHING MACHINERY CO., THE, Providence, R. I. Sou. Office, 909 Johnston Bldg., Charlotte, N. C., H. G. Mayer, Mgr.

UNIVERSAL WINDING CO., 95 South St., Boston, Mass. Sou. Offices: Johnston Bldg., Charlotte, N. C.; Candler Bldg., Atlanta, Ga. Sou. Reps.: Frederick Jackson and I. E. Wynne, Charlotte Office; J. W. Stribling, Atlanta Office.

U S BOBBIN & SHUTTLE CO., Manchester, N. H. Sou. Plants: Monticello, Ga. (Jordan Division); Greenville, S. C.; Johnson City, Tenn. Sou. Reps.: L. K. Jordan, Sales Mgr., First National Bank Bldg., Charlotte, N. C.; D. C. Ragan, P. O. Box 536, High Point, N. C.; E. R. Umbach, P. O. Box 108, Atlanta, Ga.; M. Ousley, P. O. Box 816, Greenville, S. C.; J. H. Kelly, Jordan Div., Monticello, Ga.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Reps.: Wm. P. Vaughan, Box 792, Greenville, S. C.; O. B. Land, Box 4, Marietta, Ga. Stocks at: Textile Mill Supply Co., Charlotte, N. C.; Charlotte Cupply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Carolina Mill Supply Co., Greenville, S. C.; Sullivan Hdw. Co., Anderson, S. C.; Fulton Mill Supply Co., Atlanta, Ga.; Young & Vann Supply Co., Birmingham, Ala.

VEEDER-ROOT, INC., Hartford, Conn. Sou. Reps.: W. A. Kennedy Co., Johnston Bldg., Charlotte, N. C.; Carolina Specialty Co., 122 Brevard Court, Charlotte, N. C.

VICTOR RING TRAVELER CO., Providence, R. I. Sou. Offices and Warehouses: 615 Third National Bank Bldg., Gastonia, N. C., A. B. Carter, Mgr.; 520 Angier Ave., N.E., Atlanta, Ga., B. F. Barnes, Mgr. Sou. Reps.: B. F. Barnes, Jr., Atlanta Office; A. D. Carter and N. H. Thomas, Gastonia Office.

VISCOSE CO., Johnston Bldg., Charlotte, N. C., H. Wick Rose, Mgr.

VOGEL CO., JOSEPH A., Wilmington, Del. Sou. Office: St. Louis, Mo.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Offices: Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps.: M. P. Thomas, Charlotte Office; I. D. Wingo and C. M. Powell, Atlanta Office.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Rep.: Webb Durham, 2029 East 5th St., Charlotte, N. C.

WICKWIRE-SPENCER STEEL CO., 41 E. 42nd St., New York City. Sou. Rep.: James A. Greer, 50 Rutherford St., Greenville, S. C.

DuPont Rayon Adopts Five-Day Work Week For Richmond Plant

Richmond, Va.—Adoption of the five-day week in order to give work to a greater number of people has been decided upon by the DuPont Rayon Company in its Richmond plant, Willis Shackelford, plant manager, announced. The new plan will give employment to form 150 to 200 additional workers, it is estimated.

Mr. Shackelford stated that the plan will be an inconvenience and will add to cost of operation because of necessity of training new operatives, but said that it was being adopted to aid conditions here.

The Richmond plant has on its payroll at this time from 1,300 to 1,400 men and women, Shackelford said. These workers have been on a forty-eight-hour week and will go to a forty-hour week. The new policy is not general throughout the DuPont system as yet.

In a notice posted at the plant he said to employees:

"In view of the serious employment situation existing in and around Richmond and other parts of the country it has been decided to make arrangements to go on a forty-hour week, five days of eight hours, in the rayon plant. This method of operation will enable us to increase our employment by considerable percentage, and thus spread work we have to offer over greater number of people than would have been possible under the old method of forty-eight hours. The change will result in some incovenience and expense of training new operatives, but in spite of this we are willing to do our part in relieving the unemployment situation."

Mr. Shackelford said it would take about five weeks to get the plan into full operation because of the necessity of training additional operatives.

Cotton Bags for Potatoes

The growing preference of consumers for potatoes packed in cotton bags is substantiated in reports from a score of outstanding shippers and distributors who have been co-operating with the Cotton-Textile Institute in a study made of this phase of the market possibilities for cotton fabrics as packaging materials.

The fifteen-pound size bag, carrying approximately a peck of potatoes, appears to be the popular favorite although in certain localities there is a demand for both the ten-pound and twenty-five pound sizes. One notable exception to the general use of closely woven bags of various sheetings is represented in the case of a Maine shipper who has adopted the duplex bag of open mesh on the front and of solid weave on the back. His requirements will be for 2,000 to 3,000 bags of this type daily.

C. K. Everett, in charge of the New Uses Section of the Institute, states that the current pronounced trend toward the packaging of groceries, vegetables, and even fruits and nuts offers encouraging possibilities for opening up new avenues of impressive scope for cotton consumption. Mr. Everett mentioned that a recent estimate of R. V. Cheatham, of the Division of Cotton Marketing of the U. S. Department of Agriculture, puts the consumption of cotton bags at 750,000 minimum in the Maine potato fields alone this year. In this area shippers have found that the packing of potatoes in small cotton bags serves as an excellent opportunity for strict grading that is helpful in getting best prices for their product and in addition facilitates their subsequent handling by retailers.

The wholly-owned produce-purchasing subsidiary of the country's largest grocery store chain has just recently purchased 2,000,000 cotton bags to be made up of narrow sheetings into various sizes. These will be used for the put-ups of both fruits and vegetables.

North Carolina Cotton High In Quality

Raleigh, N. C.—Cotton is running high in quality, Bembury Haywood, head classer of the North Carolina Cotton Growers' Co-operative Association, reports.

"So far we have received no short cotton—that is, cotton below 7/8—and only two bales below middling grade," he said.

He added that most cotton, classed to date, was received from warehouses in the southern part of the State, from Shelby to Dunn.

General Manager U. Benton Blalock, attributed the high quality of the crop to a "very uniform growing season, ideal weather to date for harvesting, and a wide distribution of improved seed."

The Lindale Bible Class, Pepperell Manufacturing Company, Lindale, Ga.

Mill Village Activities

Edited by Mrs. Ethel Thomas Dabbs—"Aunt Becky."

Enka, N. C.—American Enka Corporation

MR. CLARK, "AUNT BECKY" AND "UNCLE HAMP" HAVE THE GOOD FORTUNE TO VISIT THIS WONDERFUL RAYON PLANT

Mr. David Clark gave the best detailed account of things in general as we saw them, that can be written, and we hope that every reader read it last week, or that he will turn right now to the Textile Bulletin, date of Sept. 24th, and read every line of it. Were it possible for me to say anything pertaining to the various methods employed in the manufacturing process from wood pulp to rayon, Mr. Clark has already said much better. In fact his article is extraordinarily comprehensible.

But if he mentioned "Epsom Salts," I didn't notice it. That was one thing that staggered "Uncle Hamp." He's trying to reduce, by doctor's orders, and has to take a dose of salts every morning. He thought he had greatly diminished the world's supply, when lo and behold! we were shown a warehouse packed with car loads of it! Yes—in bags holding a 100 or perhaps 200 pounds each! It's used somewhere in the process of rayon manufacturing.

Enka Manufacturing Corporation is among the greatest things of its kind in the South, and perhaps in the United States. The word Enka was coined from different Dutch words and names—but all we can remember is that the "n" stands for Netherlands and "Enka" was adopted as a trade mark for these rayon products.

THE CAFETERIA

This tremendous plant is Dutch-owned. There are 2,000 acres of land, on which are numerous small truck farms grown by the operatives, and all food supplies sold to the mill cafeteria, which is in the center of the plant, and takes care of around 1,000 at the time, for lunch. Milk is 2 cents; bread and butter, 2 cents; vegetables and meats at cost. In other words, a 25-cent lunch here would cost 50 or 60 cents anywhere else.

We never saw a prettier picture than those hundreds of girls in uniforms, eating lunch in that lovely cafeteria.

In a smaller cafeteria, one hundred guests of the company were served sumptuously at two long tables, by pretty and dainty girl employees.

DUTCH CUSTOMS

Dutch people are whole-souled and go into anything one hundred per cent, if at all. In the office alone, there are 200 employees. Every afternoon at 4 o'clock, a delightful Dutch custom is religiously observed by the office force—that is—everybody drinks a cup of delicious hot tea. "Aunt Becky" had the good fortune to be in Mr. Harvey Holloman's office one afternoon at 4 o'clock (previous to this visit) and was included in the treat. Since then I've wanted to be a "Dutchman."

THE PEOPLE PROSPER

That employees are well paid is evidenced conclusively in the number of automobiles owned by them. We saw around 1,500 autos—nice ones, too—neatly parked on the parking ground just outside the enclosure. When the work first started there were no homes for employees, and around 2,000 came to work by train from Asheville and Canton, using tickets bought wholesale by the company at greatly reduced prices. However, after two years, the number of passengers dwindled down to 50 or 75, and railway service was discontinued. The few who do not now own their own cars, come in buses, and many live near by in the village, and can walk.

VILLAGE AND COMMUNITY INTERESTS

The pretty brick homes occupied by operatives would rent in Asheville or any other city for $45 or $50 per month, and then there would be extra pay for water and lights, which are free here, and rent is never more than 10 per cent of one's earnings—often less.

The people here are truly fortunate. They get full time—full pay—and have many educational and social advantages. In many sections of the South, mills are curtailing, or wages have been drastically cut and employees are compelled to economize in every possible way. At Enka, no one is worrying over the price of wood, coal, food, shoes and clothing for winter.

THE LIBRARY

We have often seen school libraries and church libraries, but never before a mill library—and there are several thousand really fine books—including Shakespeare and other noted authors. The books are used, too.

The library has a nice place, too, right in the office building, and besides so many books, has all the best magazines; these, after they have become out of date and frazzled, are given to the children for "cut-outs" and many have made from them scrap books that are truly interesting.

HOSPITAL, DOCTORS, NURSES, WELFARE WORKER

Nothing has been overlooked that can possibly be helpful or convenient for the employees. There's a nice hospital, right at the front entrance to the grounds. Two doctors and two nurses are on the job.

Miss Agee, a wonderfully pleasant little lady, is employed as social or welfare worker, and we had the good fortune to meet her.

A DELIGHTFUL VISIT

From start to finish, this was one of the most delightful visits we have ever made. It will always be a wonder to us how so much brick, mortar and cement could ever

be put together. It took two hours at what Mr. Vanderhooven called the "American pace"—(meaning we are fast!) to get over the plant. Mr. Clark was ready to drop out before we got around, but we laughed at him for letting older folks tire him out, and he stuck to us!

Our sincere thanks go out to American Enka Corporation for including us in their invitation for visiting day. These people are making thousands of friends by their unfailing courtesy.

And—if "Uncle Hamp" finds any difficulty in obtaining "Salts," we now know where there is plenty!

Asheville, N. C.

CLYDE FABRIC CO.—FRENCH BROAD MILLS

It had been many years since we visited this plant, where many changes had taken place, and still more to be made. Consequently not near all the machinery was being operated.

Superintendent H. L. Dillard could not have welcomed us more warmly, or shown us finer courtesy. We met several friends of old Mill News days and had a really pleasant visit. When things get in full swing, we hope to go there again.

C. L. Andrews is overseer carding; B. G. Payton, overseer spinning; J. L. Beard, overseer weaving; Ben Debruhl, master mechanic.

The product is canton flannels and knitting yarns.

Ninety-Six, S. C.

NINETY-SIX COTTON MILLS AND VILLAGE VERY ATTRACTIVE. FINE NEW CHURCH A GIFT FROM MILL PRESIDENT

I can't remember receiving a warmer welcome anywhere, than was extended here by Superintendent J. G. McNeill and his bunch of overseers. Had not been here in years, and just stopped to say "howdy," not expecting any business, as we had such a fine list of subscribers at this place. But Superintedent McNeill said "Becky Ann" should not go away without the where-with to buy gas, and we actually secured eight subscribers.

Now talk about fine and loyal people—but here's where they are found. The mill officials and department heads are close friends of the operatives; work runs good; the village is exceptionally nice and attractive; there are good schools, churches, and now a fine new community house going up.

FINE NEW METHODIST CHURCH

The only other mill church we have seen that will compare favorably with the new Methodist church at Ninety-Six, is at High Point, N. C., at Highland Cotton Mills, and was a present to the people from the mill company.

The church at Ninety-Six, is the one our correspondent, Miss Elsie Staggs, wrote so enthusiastically about a few months ago, when it was dedicated,—Bishop Candler, of Atlanta, officiating, if we remember correctly. (Had hoped to see Elsie, but she was out the day of our visit.) There is not one cheap looking thing about this large and lovely church and pews and its many class rooms with nice furnishings. The Cradle Roll department has cute little beds and chairs for the little ones, is a sight to make a mother's heart thrill with joy.

There is a nice Baptist church too, and the people are devoted to religious work and those things which are for community good.

Ninety-Six baseball team has made a fine record this season and is playing for championship in the Little World series, of Palmetto Textile League.

OVERSEER, NINETY-SIX COTTON MILLS

J. L. Williams, carder; J. M. James, spinner; E. W. Seigler, weaver; J. L. Burrell, cloth room; J. E. Haas, master mechanic.

Officials—J. C. Self, president; J. B. Harris, vice-president; J. G. McNeill, superintedent. Office manager, J. T. Hipp.

Nine of the above ten names begin with the initial J. The exception is E. W. Seigler, overseer of weaving, and we suggest that he be rechristened "Jiggs" to make the list of J's complete.

W. H. Still Migrates South

STOPS AT BOWLING GREEN AND CLOVER, S. C.

Dear Aunt Becky:

I woke up one morning recently and saw a big flock of birds going South. I thought cold weather was coming, so I cranked up and started South too, and did not stop till I reached Bowling Green, S. C. I found lots of improvements here; mill painted inside and out, new combers added and work going fine.

Mr. Edward H. Smith, treasurer, is a fine young man. D. B. Parrish is superintedent. One of my old friends whom I had not seen in 20 years, is general overseer carding and spinning—M. L. Withers.

CLOVER, S. C.—HAMPTON SPINNING MILLS

is where they do things. Run full time and make high-grade fine yarns. New spoolers and other machinery has just been installed and everything is up-to-date and everybody seems happy.

Mr. L. L. Hardin, general manager is always in a good humor and it is a treat to visit his office.

John W. Long, is general superintedent, assisted by J. W. Quinn; W. E. Holmes is overseer carding and W. L. Dawkins overseer spinning in Mill No. 1; J. E. Brackett, overseer twisting.

J. R. Parrish is overseer carding and C. W. Long, overseer spinning in Mill No. 2. R. L. Long is night carder, and D. C. Brooks night spinner, in Mill No. 2. B. K. Nivens night overseer twisting and warping; Luther Hogue, overhauler; J. E. Kennedy, master machanic.

A Few Thoughts

Nature is wonderful! A million years ago she didn't know we were going to wear glasses, yet look at the way she placed our ears!

No matter how you move it, writing remains stationery.

Some of the busiest people in the world are only picking up the beans they spilled.

A go-getter is a man who runs out of gas two miles from a filling station.

The law gives a man the right to open his wife's letter, but not the nerve.

Why take life too seriously? You'll never get out of it alive.

Man today can fly like a bird, but he will never be able to sit comfortably on a barbed wire fence.

A certain party has trouble trying to remember whether his radio set has eight tubes and ten payments or ten tubes and eight payments.

Modern worship is divided between the Golden Dollar and the Silken Calf.

Many things can be preserved in alcohol—reputations are not on the list.—*The Roundup, El Paso.*

CLASSIFIED ADS.

WANTED—One used Condenser and Jet Pump. Dean make preferred, about 12x16x20. Good condition. S. M. H., care Southern Textile Bulletin.

WANTED—Position as overseer carding or spinning. 35 years old, married. I. C. S. graduate. 5 years experience as overseer, 12 years as section man and grinder. Now employed. Best of references. Address C. S. C., care Southern Textile Bulletin.

THE RIGHT WAY TO TRAVEL is by train. The safest. Most comfortable. Most reliable. Costs less. Inquire of Ticket Agents regarding greatly reduced fares for short trips.
SOUTHERN RAILWAY SYSTEM

Viscose Will Use U. S. Standards in Quality Control

In the future, The Viscose Company in its quality control plan, will adhere to the rayon underwear size standards recently adopted at a meeting of the trade under the auspices of the Trade Standards Division of the U. S. Bureau of Standards, instead of those which it had previously used, according to John Spooner, merchandinse manager of that company.

The move was taken to encourage the standardization of garments and since the new specifications do not differ very widely from the original ones prepared by The Viscose Company, it was decided for the sake of uniformity to accept the new standards. Active in the formulation of the new specifications was the Associated Knit Underwear Manufacurers of America, under Roy Cheney, and some of the most experienced men in the trade worked unpon them.

Instead of publishing its underwear specifications in the past, The Viscose Company will distribute to manufacturers and retailers copies of the Bureau of Standard's measurement standards.

Classified Rates

Set Regular "Want Ad" Style, without border or display lines—4c per word, each insertion.

Minimum charge, $1.00. Terms—Cash with order.

Set Display Style, with headings in larger type and border—$3.00 per inch, one insertion.

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18 West Fourth St. Phone 3-2972 Charlotte, N. C.

Columbus, Ga., Mills Near Normal Shifts

Columbus, Ga.—Practically normal conditions are reported by the textile mills in this section.

The Eagle & Phenix Mills, the Bradley Mfg. Co. mills, and the Columbus Mfg. Co. mills all report that they are running full time, while the mills of the Bibb Mfg. Co. are running full time during the day and part time nights.

The Columbus mills are operating only upon orders and are avoiding building up much of a surplus under present conditions.

2,091,513 Bals of 1931 Crop Ginned

Washington, D. C. — Counting round as half bales, and excluding linters, a total of 2,091,513 bales of cotton were ginned from the growth of 1931 prior to September 16, according to figures by the Department of Commerce.

These figures compare with 3,376,-120 bales ginned last year during the corresponding period, and 3,351,613 bales in 1929. Ginnings for the current year include 71,307 bales of the crop of 1931 ginned prior to August 1, which was counted in the supply for the season 1930-1931, compared with 78,188 and 86,974 bales of the crops of 1930 and 1929, respectively. The figures also include 56,441 round bales for 1931, 94,406 for 1930, and 72,880 for 1929. American-Egyptian included for the three periods amounted to 797 bales, 1,370 and 1,038, respectively.

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WHEN you see a manufacturer's advertising in the pages of your business paper, you may know that THAT manufacturer is not only efficient in production, but that he also knows how to DISTRIBUTE effectively and economically.

And that is important to you as a purchaser of manufactured articles. For the cost of distribution enters into the cost of everything you buy. Efficiently distributed goods cost less, quality for quality, than goods distributed through haphazard methods.

Manufacturers who advertise in business papers use the shortest, most direct, most economical way to reach you with a selling message. They are buying concentrated circulation WITHOUT WASTE. They are applying advertising dollars wisely where those dollars will reduce other selling costs.

Through their selection of efficient means to advertise, they are giving proof that the products they offer to you bear the minimum cost of distribution—that those products, quality for quality, are lower in cost than products distributed either laboriously WITHOUT advertising or carelessly with WASTEFUL advertising.

THIS SYMBOL *identifies an ABP paper . . . It stands for honest, known, paid circulation; straightforward business methods, and editorial standards that insure reader interest. . . These are the factors that make a valuable advertising medium.*

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That's what it is—as advertised. Although it has taken us a little more than a century to gradually build it. Our technical service today has cost us close to a million dollars. As makers and distributors of products that play such a vital part in the textile industry, we must know to an absolute certainty just what our products can or cannot do for our clients.
This service is particularly adapted to your specific textile needs and is available any time to assist in solving your problems.

Sizing Compounds

For weighting and finishing all textiles

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Sizing Gums
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Softeners
Soluble Gums
Soluble Oils
Soaps
Dextrines
Colors
Pigment and Lake
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Liquid Chlorine
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(Bleaching Powder)
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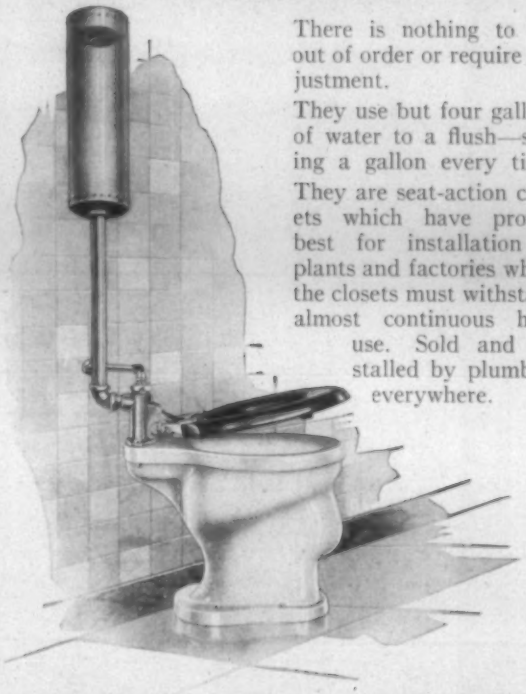

There is nothing to get out of order or require adjustment.

They use but four gallons of water to a flush—saving a gallon every time.

They are seat-action closets which have proved best for installation in plants and factories where the closets must withstand almost continuous hard use. Sold and installed by plumbers everywhere.

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